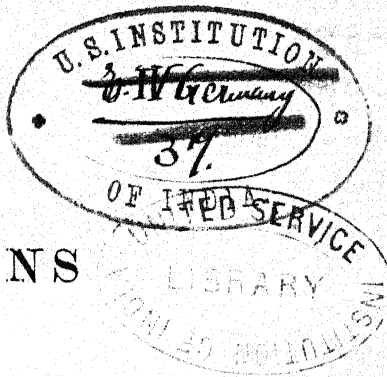


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INSTRUCTIONS

FOR THE

TRAINING, EMPLOYMENT, AND LEADING OF CAVALRY.

BY

MAJOR-GENERAL CARL VON SCHMIDT.

COMPILED BY

CAPTAIN VON VOLLARD-BOCKELBERG,
2ND SILESIA DRAGOONS.

TRANSLATED FROM THE GERMAN FOR THE INTELLIGENCE BRANCH
OF THE QUARTERMASTER-GENERAL'S DEPARTMENT,
HORSE GUARDS, WAR OFFICE,

BY

CAPTAIN C. W. BOWDLER BELL,
8TH HUSSARS.



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MAJOR-GENERAL CARL VON SCHMIDT (born 1817, died 1875) was commonly considered the most able cavalry commander that Prussia had seen since the days of Frederic; at any rate no one man has exercised so great an influence for good on our arm since the great King.

Von Schmidt's first publication, "Auch ein Wort über die Ausbildung der Kavallerie" (1862), caused a profound sensation in the Prussian cavalry, and may perhaps be considered as having laid the foundation, or at any rate cleared the ground, for the structure of the noble edifice which the German cavalry of to-day presents to our eyes. As a member of the Cavalry Commission of 1872, the outcome of which was the Cavalry Regulations of 1873 (now in force), von Schmidt exercised important influence on the cavalry service of his country; but the culminating point of his labours and genius was the issue in 1875 of the revised Part V of those Regulations, drawn up by a committee of which he was president.

The so-called "Instructions" of Major-General von Schmidt are in reality extracts from the various materials left by him, in the form of MS. notes dating from 1850, and the numerous Orders and Circulars which he had issued at different periods from the time when he commanded a squadron until within a few months of his death in 1875.

The task of compiling these important relics was entrusted by His Royal Highness Field Marshal Prince Frederic Charles, Inspector of Cavalry, to Captain von Vollard-Bockelberg, who had been for many years von Schmidt's Adjutant.

Such being the origin of these Instructions, the reader will be prepared for peculiarities in style and composition which are perhaps inseparable from a work compiled from such heterogeneous sources. The text abounds in repetitions, and of course presupposes a certain acquaintance with the German cavalry formations and drill.

As to the translator's part of the performance, he has been guided solely by the desire to make the text easy to be under-

stood. In endeavouring to do this, elegance of style has been altogether left out of consideration, and the *ipsissima verba* of the author have never been departed from when a nearly literal translation was plainly understandable.

In order to facilitate the study of the text, the translator has ventured to insert references to certain Plates taken from the German Cavalry Regulations which will be found at the end of the book.

The original work is prefaced by an introduction from the pen of Major Kühler, which contains a succinct account of the life and work of Major-General von Schmidt: this has been omitted in the following translation, as have also some sections of the book which refer to details of drill that are either inapplicable to our service, or had already been dwelt upon in previous chapters.

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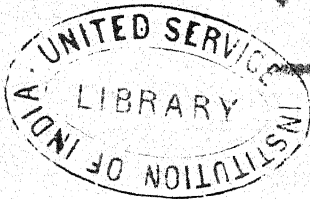
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PART I.—PRELIMINARY OBSERVATIONS ON THE TRAINING, EDUCATION, EMPLOYMENT, AND CONDUCT OF CAVALRY IN GENERAL.

It is only by a vigorous endeavour to bring about real and lively progress in our arm, that we can hope to keep pace with the other arms, into which from a technical point of view, owing to modern inventions, and also intellectually, so fresh a life has been infused. This progress is as necessary as it is achievable, if only we adopt correct principles and constantly act upon them; not empirically groping about at random, but following a fixed and logical system in all branches of our service. We must recognise clearly the defects that still cling to us, observe in what we fail, and not be penetrated by a belief in our excellence; nor must we estimate too highly the success which our arms obtained in the last campaign, nor think because all went well then, that we can never fail; the entertaining of such ideas would lead us directly backward, and every impulse towards improvement would be stifled. On the contrary, the incidents of this campaign must have opened our eyes to many faults, and ought to incite us to do our utmost to do away with them; so that we may be more capable when we enter upon the next campaign, and be able to meet coming events with a clear conscience and well prepared. We require less progress, however, in technical improvements and inventions than in a mental, intellectual direction; progress which is nearly described by the following words, *handiness, mobility, manœuvring power, rapidity, independence, and lightness*. We require the greatest dexterity for the individual mounted soldier in managing and handling his arms; the greatest mobility and manœuvring power for the troop as a whole, in all directions and in whatever position it may happen to be; the greatest rapidity possible; the greatest independence of the other arms in every kind of duty which can be required of our arm; and the greatest lightness, including diminution of the weight to be carried by the horse.

The first-mentioned condition, the greatest dexterity of the individual mounted soldier in handling his arms, depends on a good, sound system of equitation, upon the training of man and horse, and a perfect understanding between them.

The second condition, the greatest mobility and manœuvring power of the whole troop in all directions and in whatever for-

mation it may happen to be, is founded on well-established principles regarding the movement of our arm; on correct, sound riding, and evolutions in line and column, by which the same pace is necessarily kept throughout by both right and left wing in line, and front and rear bodies in column; on the solid training, theoretical and practical, of the zug-leaders and flank-guides of zugs;* on the employment whenever possible of oblique (diagonal) movements; and on conquering the inclination there always is to resume the normal formation. It is impossible to work sufficiently in inverted order, and a leader should never be afraid of having his troop in this formation. The shortest routes, the simplest and easiest evolutions are the best for our arm, so as to bring it to the precise spot at the right time. This only befits cavalry; we have no time to lose. The word "too late" is the most disgraceful that can be applied to us; it implies great losses and a failure. The soldier who arrives too late on the drill ground, who has not accustomed himself to coming there to the moment, that man will also arrive too late on the field of battle. The instinct of arriving at the exact time must be engrained in each one's flesh and blood; and that is learnt only by the giving of exact, prompt, and rapid orders, and the habit of taking quick resolutions on the drill ground. But that officer will always arrive too late who takes only perpendicular directions and is afraid of oblique ones, who always wants to return to the normal formation, and consequently executes a string of useless movements instead of wheeling into column, into line, and to the rear by zugs, employing inversion, and accustoming his troops to the formations necessary for working in that order. In this respect we have great need of progress.

The third condition, the greatest independence of the other arms in all the duties which can fall to cavalry, consequently the abolishing of the frequently heard call for infantry, which reduces us to an auxiliary arm and makes us incapable of independent actions and operations, finds its principal argument in the arming of cavalry with an improved firearm and an increased instruction in the use of it, which can in no way be prejudicial to the proper professional instruction of the cavalry soldier. The dragoon must not be or become a mounted infantry man, but when he cannot attain on horseback the object indicated to him, he must be able to accomplish it on foot with his firearm; he must know how to seize and defend a village, a wood, a defile, a position; he must provide for the security of his own cantonment; he must also be able to hold particularly important points for a time until the infantry comes up. But for this purpose, it is necessary that he shall have been thoroughly taught the use of the firearm, shall have learnt to aim, and shall have received certain instructions on the ground, in order that he shall not, as happened sometimes in the last campaign, reach the field of battle totally unprepared. It must be an invariable

* Flügel Unter Offizier; one on each flank (front rank only) of each zug.—Tr.

rule that the cavalry soldier only fires on horseback to signal, and that his only weapon when mounted, even when acting as an *éclaireur*, is the sword; while on foot he uses the carbine for attack and defence. This will not suppress the true cavalry instinct, the active venturesome spirit that prompts to take the initiative, but will strengthen it; it will increase and confirm the self-confidence and *amour propre* of cavalry, and will open out a future to our arm which will then boldly hold its own with the other branches of the service, much as they have profited by modern technical inventions.

The fifth condition, the greatest lightness, including the utmost possible restriction of the weight to be carried by the horse, can only be arrived at by the simplification and diminishing of the weight of the matériel, the saddle, kit, and equipment; a few pounds less weight to be carried will make the horse more fit for work, more enduring, which indeed cannot be overrated when we consider the requirements of the new fighting tactics, the present mode of employing cavalry, and the increased claims now made upon it.

Only by properly pulling the horses together, by the most thorough training in order to obtain perfect equilibrium, by diminishing the weight to be carried, by very gradual increase of requirements and habituating them to increased exertions, can we produce greater efficiency.

With regard to the first and fundamental principle, the development of the greatest dexterity in the individual soldier in handling his horse and using his weapon, one cannot lay too much stress upon this, that the most thorough individual instruction of the soldier and his horse is our first exercise for acquiring independence. I do not here refer to superficial instruction given to men in a mass, which certainly gives a faint colouring of knowledge, but one that is only temporary, and on the most trifling occasion fails to hide the incapacity hidden beneath it.

This unique principle cannot be better characterised than by the expression *bodily and mental gymnastics*. Both must proceed hand in hand; in the case of the horseman, and as regards the horse, the first (bodily gymnastics) refers to his carriage and position, and the means of suppling and collecting him. In addition to increased usefulness and capability for work, the preservation and durability of the matériel will thus also be effected. It is not possible to carry far enough the development of the bodily activity of our men; not only that they should thereby become better riders, more dexterous in the handling of their weapons, more apt for the performance of all their duties, these are the direct, material results; but they become accustomed to perseverance, venturesomeness, and enterprise; they learn to will, which is equivalent to being able. They thus acquire mastery over their bodies which subsequently develops in them self-respect, self-trust, and confidence, which must positively be inculcated upon the cavalry soldier if he is

really to accomplish any thing. These are moral advantages which cannot be sufficiently valued.

Next as to the direct, material results of this principle, bodily gymnastics, the production of the most perfect equilibrium so as to obtain the greatest ease in all movements and to diminish the danger in case of accident, we must develop bodily activity in the highest degree, attaining this through the prescribed means, viz., suppling exercises, vaulting on the spring-board and wooden horse, on the living horse both standing and when in motion, exercises in jumping, on the bar, in climbing, fencing, and sword play. Naturally the whole thing depends on the spirit in which these exercises are undertaken and carried out; the real end in view is not to give exhibitions of skill, to shine at inspections with exceptional performances by individuals, such as will always be found among a mass of men who have special bodily aptitude, but the one only object must be—

“Direct individual influence on each soldier, developing his bodily activity, establishing equilibrium between the parts of his body, giving him the ability to concentrate his strength spontaneously at the right place, raising the general level of the whole mass, and not of individuals to whom all this would be easy.”

These individuals, gifted with special aptitudes, are very useful as leaders to show the way in leaping, vaulting, and gymnastics. Each instructor must form a certain number of such assistants; they contribute enormously to success by showing to others how things are to be done, their example is an encouragement to others, and it would be impractical not to make use of them.

If the instructor himself can perform the exercises with ease, dexterity, and certainty, so much the better, and his instructions will be the more effective. Too much care cannot be taken in the choice of instructors. If any thing is really to be done, it is absolutely necessary, especially as regards non-commissioned officers, to train instructors for the different *specialités*. Of course all non-commissioned officers must be trained and qualified to act as commanders of squads, as flank-guides of zugs, and know the foot drill; but on the other hand, for the special duties, such as vaulting, fencing, theoretical instruction, riding-school work, and zug-leading, it is necessary to select and train those who are most apt and best qualified for these employments.

The regular instructor must always have an assistant at his side who, through always being present at the lessons, will be in a position to know the different stages of progress that the men have reached, and being conversant with the ideas and intentions of the regular instructor, can, as his substitute, carry on the instruction when he is unable to be present; at the same time this assistant gains further instruction from the regular instructor, which also is a most important matter.

In this manner we proceed systematically and logically, and

we must always bear in mind that in instruction the following out of a fixed system and principle, even in the hands of men of little energy, of comparatively inferior endowments and knowledge, and of narrow comprehensions and views, always brings about better results than would be attained by an illogical and disjointed mode of proceeding, an absence of all system, and the capricious carrying out of their own whims and fancies on the part of much more gifted and energetic persons. Indeed the latter case is not unfrequently illustrated; people think they can bring about the same results by energy and talent, but they are very much deceived.

Once more,—we must have judicious selection and training of good instructors, must institute and keep up assistant-instructors, proceed in a thoroughly systematic manner in our instruction, and erect a structure on solid, logical foundations. It is necessary, therefore, before all things, to lay a sure foundation in having things simple and easy to be understood, which is the first condition. The instructors must not only know the end to be obtained, the way and means to arrive at it, but they must also be thoroughly acquainted with the subject as a whole, the causes and effects, the why and wherefore of the thing, for then only can they infuse the real spirit of the system into their instruction. Only when the teacher himself is thoroughly clear about the reason of each exercise and lesson, will he be able to regulate them judiciously, to interpolate intermediate exercises and lessons which will facilitate the work of his pupils, and so be able to give them a more complete education. The very smallest claim that men have a right to make upon their instructors is, that they shall thoroughly understand their subject, shall be always prepared to instruct, know what they wish to make their pupils do, know what is logically suitable for each lesson, and what is exactly necessary to facilitate the progress of their pupils. Only when the instructors are well prepared can they accomplish anything, and it is not until they have really effected something, and are conscious of having done so, that they take an interest in their work, and feel it no longer a drudgery; then only will their work be of value.

Our great King Frederic has already said, "*Soignez les détails, ils ne sont pas sans gloire; c'est le premier pas qui mène à la victoire.*"

Let us always bear this in mind; let nothing be too small for us to attend to; that man will never attain to great things, to whom small things are too insignificant.

Now as to the second point, which relates to intellectual exercise: the times are happily gone when one could say, and rather boasted of being able to say, that the stupid man without two ideas in his head, the man who never thinks, makes the best soldier, and that because he obeys blindly. If this saying has ever really had any foundation in truth, it certainly can never have applied to cavalry, whose duties require so much reflection and exercise of the mental faculties, as much during training,

especially in riding, as in practice when engaged as *éclaireurs*, patrols, and in advanced-guards. How is it possible that the cavalry soldier, who is the eye of the general, can observe well, report properly, and draw correct inferences, if he does not think? How is it possible that he can ride with judgment if he does not use his reason?

Both for direct and indirect ends and considerations, then, must it be our most earnest endeavour to cultivate the intellects of our men, to make them intelligent and adroit, to stimulate them to reflect always and adequately, to enlighten their judgments.

They will thus not only be more apt in all respects in the performance of their duties, especially as regards service in the field and riding, since they will learn to understand us, will be raised more to a level with ourselves, will understand everything better, will enter more fully into the instructions and orders given to them, which is especially of importance in the field; but the effects of such an education will show themselves in their whole life, and thus the saying will be truer than ever, that the Army is the great school for the nation, the means for completing their training and education.

As the idea must be kept in mind that all the special subdivisions of the service have a common bond of union and tend to a common end, so must this intellectual side of the question be always kept in view in each branch of instruction, not only during the theoretical instruction, which addresses itself directly to the understanding, but also in foot drill, suppling exercises, vaulting, fencing, and equitation.

All these various exercises must be carried on with fresh intellectual stimulus, with life, and in such a manner as to keep the faculties on the alert; the greatest possible variety must be introduced in order to interest the men; and wearying lessons, protracted so as merely to kill time, must be carefully avoided. In regulating the instruction of men the main point is to ensure that they are interested, stimulated, and taught; this depends entirely on the instructor, whether he has heart and soul in his work, or is content to do his work in a perfunctory manner, thinking only to kill time, and not caring whether he produces any effect whatever. To him justly apply the words of the poet,—“That which you do not yourself feel, you will never inspire others with; that which does not come from your soul will not touch the hearts of your hearers.”

His whole behaviour and manner will involuntarily, and as it were electrically, communicate itself to his class. Working by contract, so to speak, in a dull, lifeless manner, acting strictly according to the letter, but not in the true spirit of the regulations, all this must be thoroughly eradicated, and in place of it we must have intellectual freshness and an earnest striving for real progress in all respects; when this is obtained, we shall be on the right road, and everything else will follow of itself.

The more this principle is acknowledged, and we take the

true, plain, direct road to the end in view, without following bye-paths and roundabout routes, in the same degree will the service become simplified, less time be taken up, greater advantages and results gained, and the instructors be more and more gratified as they see the rich fruits of their labours. With this increased energy on all sides we must strive after greater knowledge, a deeper understanding and insight into the nature of things, ability to draw correct conclusions, and power to maintain firmly the principles which we have acknowledged to be true: then will the results be greater from year to year.

We must always take care that the soldier really understands us; that he replies and speaks after his own fashion, but after reflection and deliberation, and therefore he must, first of all, become gradually used to our mode of expression; thus shall we avoid the deadening influence of learning by rote. Everything turns upon this, for if it is otherwise the point of the thing will be lost, as it has always happen when any subject is not judiciously treated.

Above all things, all our energies must be devoted to the attainment of individual instruction, in opposition to the rapid training of masses, which utterly destroys intelligence. The former alone can be of service to the country and to the individual soldier, and alone can gratify us in the results of our labours, as it has in view not only the soldier and dragoon, but the man, whom it raises and educates to higher things.

In this respect, too, most remains to be done; for this is the most difficult part of our work, and more than anything else requires knowledge and experience. Everything that is dull, cannot be easily understood, or is uninteresting, must disappear; the cavalry soldier has less need of this than anyone. With such instruction he is quite useless, for to him more than to any one else are freshness, life, activity, mental quickness and vivacity, necessary. If we work all through in this sense and spirit, we cannot fail to exercise the greatest influence on the whole life of our men; and as we involuntarily and very rightly judge of the result of gymnastic exercises from the manner in which the cavalry soldier holds himself and walks in the street, so can we judge of the effect of his intellectual education from his wide-awake manner, his vivacity, his lively comprehension, his speech, his whole deportment, his expression, the whole look of the man.

With such men one can undertake anything. They understand their leader, enter into his thoughts and ideas: they take in everything rapidly: nothing is too much for them. They dare anything, and carry it out resolutely. They have unlimited good will, and it is especially necessary to develop this quality, for the soldier, be he high or low, cannot hold back anything; he must give to his uttermost, and keep nothing in reserve.

One must not believe that the natural excitement resulting from danger would develop these qualities when the soldier finds himself in serious circumstances. Experience has suffi-

ciently taught us that where no solid foundation has been laid, where no sound work has been done, where no seed has been sown in time of peace, no harvest is reaped in the field, and our expectations are not fulfilled.

Before all things, therefore, both instructors and dragoons must labour with all their might, with greater energy, circumspection, and increased knowledge of the subject, in the training of the horses; this will ensure greater usefulness and durability. Undoubtedly the fewer old and experienced riding masters we have, who take the liveliest interest in their work, and whose chief pleasure consists in showing up a thoroughly trained ride, so will this task become more and more difficult.

The attainment of the most thorough training for the horses is then of absolute necessity, so that we may be ready for war, that the matériel of the country may not be wasted, and our horses worn out before their time.

We must, then, give the greatest attention to the training of the horses, to the true placing of the head and neck, seeing that they are equally free from being behind the bit, or having the head drawn downwards towards the chest, as from staring with neck or head stretched forward. For this, then, it is absolutely necessary before all things to practise careful but thorough suppling of the neck, bending and loosening in all directions, which alone will bring about the position of the head suitable to the horse's structure, by which alone equilibrium, freedom, safety, power of endurance in his paces, and the preservation of the horse are attained. It is not possible, therefore, to take too much care or enough trouble in suppling the neck, and getting the position of the head and neck which results from it. There is an old horsey saying, "If you are master of the head, you are master of the horse," and this points to the truth. The neck and head are the rudder, the helm on which all depends. Only through the right position of the head and neck can the horseman have any influence over the hind-quarters, by which everything is effected. But still the horse must carry *himself* with head and shoulders not hanging heavy and dead on his rider's hand, but light in the mouth. This must be arrived at by incessantly keeping in view, as a fundamental principle, during the whole training, in the collected as well as in the freer paces, that the great end is *forward motion* and *momentum*, which must be further developed and perfected in the course of training.

The whole work, even the neck-suppling, must be effected from behind forwards, and never in the opposite direction. Passaging and shouldering are among the principal means of training the horse, for suppling him and producing equilibrium; they are, so to speak, the suppling motions and gymnastics of the horse; but it is of more importance to look to the quality than to the amount of these exercises. Long lessons in them should not be given, but only very short ones, say along one of the long sides of the manège, and facing the instructor. The longer the lesson lasts, so much the worse will be these side-

paces; the horses will not lend themselves to the work, and the riders will be more awkward and stiff. One should attach great value to breaking off singly, from the halt, walk, and gentle trot; this promotes increased dexterity in the horseman, and is a rational elementary training for the horse. It is certain that the rider who goes through these lessons at the various paces indicated so correctly that it may have the desired effect on the horse, will know how to ride and how to handle a horse.

We all wish our horses to be able to keep up the fastest pace for a considerable time and well within their powers, and also to be able to turn them, *i.e.*, to have them well in hand; but the way to arrive at this is to ride at slower paces, collecting the horses, a matter which is often very much misunderstood. The riding school is not a race-course, but is intended to produce equilibrium in the horses, to collect and train them; this alone insures the possibility of having the horse in hand in the field at all paces, of being master of him; this alone gives the horse full control over his forces and limbs, and owing to the equilibrium in which he finds himself under his rider, enables him to pass with ease over broken and difficult ground, and to get over obstacles.

We must also not confound the object, the end, with the means leading to it. He who rides hard and always at full paces in the training of a horse will not be fit to ride at these paces in the field; his horse will hang on the bit, be low in the forehead, will not be able to turn, and will be broken down before his time. The trained cavalry horse must at all times retain the power of being collected, of concentrating his forces under the direction of his rider; at the same time he must be able to free himself at any time from this collected state, without, however, getting out of hand or becoming disobedient. The new long-range weapons of precision have caused increased claims to be made on us, which must always be kept in mind from the very commencement of our training, if we wish to satisfy them. Now that the squadron must pass over 2,000 paces at full gallop, and must after that be in sufficiently good order and wind to charge, the horse must be differently trained, and be more in equilibrium and in hand, than when, as in days gone by, only 200 paces had to be ridden at a gallop. But we know by experience that there is no order, there are no correct intervals, when the horses cannot keep up this racing pace evenly and quietly, but begin to change their legs, to yaw, get flurried, and cannon against their neighbours; when the rider is not used to keeping a quiet firm seat at this pace, when he is shifted by his horse, and the latter springs with stiff, strained back, and the hind-quarters raised. The horses lose their wind when this gallop inconveniences them, when they become violent, change legs, and rush impetuously; they are then much sooner out of wind. It would be a great mistake to suppose that the great fatigue, unavoidable in the face of an enemy, would make all the horses quiet in charging. It is nothing of the sort, and after the

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hardest exertions the same things are to a great extent found to occur in the actual charge as are seen in the drill ground—disorder in the ranks, and no cohesion whatever—from which but little is gained, and a great deal more lost.

The troop should only execute before the enemy such manoeuvres as it has been accustomed to in time of peace. Good practical habits produce certainty and safeness in execution, and give the best results; defective, unpractical habits produce uncertainty in practice, bring about great losses, and generally lead to disaster.

The long gallop, therefore, must be the end and aim of our instruction, and for this we require correct placing of the horse, that he shall carry himself properly, be collected and in equilibrium, with the neck well drawn in towards the withers, and the muzzle lowered.

In face of the new tactics and the long-range weapons of precision, the increased practice of this long gallop, especially in line, has become a point of the greatest importance, one that concerns the very existence of cavalry; for only through this can it continue to play the rôle that it has done with such éclat in former wars, and which it must still claim to play in the fights of to-day; only through this will it be able to paralyse the effects of the rapid breech-loader, to pass as quickly as possible in any formation over long stretches of ground, in perfect order, and without winding the horses.

The enormous effect of the quick-loading weapons at distances within 800 to 1,000 paces, must necessarily put in question the results of the charge, if the rapid execution of it did not diminish the losses and heighten the impression made by it. Every line attacking will in consequence have to betake itself to the gallop in good time, as many instances in the last war proved; at the same time we saw that in consequence of want of practice and imperfect training in galloping in line, the attacking bodies lost their cohesion and became very loose. This can be prevented by thorough previous training, for long-continued advances in line at great pace require much practice; otherwise the line becomes very loose as the balls increase the gaps, and on order and vigour depend results which may be historical. It surely requires no further proof that we cannot make too great demands on our horses in this respect; a gallop in line of 600 paces or more, after six weeks of gradually progressive training, ought not to be considered a very great performance.

This is not calling for fresh increased efforts; we only insist on the now compulsory practice of gallops in line; for the most rapid movements must inevitably be made in the most inconvenient formation, in line, and must be executed with perfect certainty, with good wind and cool blood, both of man and horse. The practicability of this is shown by numerous proofs, and this has only been obtained by thorough training of the horse in winter, judicious exercises in galloping, accustoming

man and horse to a long free stride, in which both must feel themselves at ease, and very gradually increasing our demand on the horse's powers. This improving of the gallop is a stern necessity, if cavalry is not to disappear from the field of battle. No movement is more important or more difficult, and therefore no exercise is more necessary, and in nothing is progress more imperative.

An old proverb says, "The horse must be cared for in the stable as the apple of one's eye, as if he were worth a million: but he should be ridden and worked as if he were not worth a farthing."

In support of this view, it is sufficient to show what Frederic the Great expected of his cavalry.

In the instructions for the spring drills of the cuirassiers and dragoons, dated 14th December, 1754, that is just after the experiences of the war in Silesia, and a few years before the memorable Seven Years' War, and while actually preparing for it, His Majesty orders, "In the spring, and especially during the 14 days before the review, the horses must be got into good wind, as I cannot spare them as one does in camp, but must use them as in the field or in action. On days therefore when there is no drill, the whole regiment, except the remount horses, must trot, at first 1,000, and then 2,000, 3,000, and 4,000 paces. When the horses are thus in wind they will not be blown in the charge, will not break down, nor become sick when subjected to fatigue. It is of the greatest importance that the cuirassier's or dragoon's horse should be able to stand work. We may expect to have to gallop at 1,200 or 1,500 paces from the enemy, and to charge for 400 or 500 paces; it is not enough to overthrow the first line, but the enemy must be followed up, so that the first line may be hurled back on the second and throw it into confusion.

"When the enemy's confusion is complete, and there is nothing more to make a stand against us, squadrons must be detached, which the first line must follow in good order at a brisk trot, until the enemy's cavalry is completely severed from his infantry and cannot subsequently rally on it. It may then happen that the cavalry has to act against infantry, to take the enemy in flank or rear, for which it is evident that the horses must be in good wind; indeed, both with man and horse, all is a matter of habit."

These are the very words of the great King. But we know that at the reviews they executed gallops of 2,000 to 3,000 paces, and often repeated them at once. These reviews began at the end of May. Exercises of this sort prepared the cavalry for the Seven Years' War. How would these exercises have been enhanced if the King had had our incomparable horses at his disposal, and had had to take into account the grazing and rapid fire of the breech-loader!

Bearing in mind the experiences of that time, which are still fully applicable to the present, we shall certainly not follow the

wrong road if we, at the least, make the same demands on our cavalry and prescribe the same exercises for it.

In spite of all this, the opinion often prevails in our time that we require everything different, that everything must be new, and that we must have nothing in common with the usages of former days. To oppose these false and mistaken ideas we need only reply, that it is simply necessary to fix the exact time about which we are speaking; it is all or nearly all new, if we consider only a period very lately elapsed; but all appears old, as has been pointed out above, if we turn back to the time of Frederic, and we can only repeat that if cavalry would reach the high standard of efficiency that it had in Frederic's time, it must cling to the traditions of his period in every single respect, whether in regard to training, education, individual riding, organisation, mobility, rapidity, manœuvring power, tactics, independence, or employment in general.

Every one who has the interest of his arm at heart, and desires that it should again take the rank that it justly had in the time of Frederic, should undoubtedly, for his own part and according to his position, do his utmost to cause these principles to be revived and instilled into the soul of every one, so that it may be possible to attain this great end. It is not the technical and tactical conditions of the other arms that hinder us, but we ourselves, inasmuch as in the course of time we have completely abandoned these principles, and have imagined that they no longer apply to our present conditions.

As a further proof in support of this assertion, perhaps the following passages extracted from the Regulations for the Hussar Regiments, 1st December, 1743, will suffice:—

SECT. VI, ART. II.

“In order to attain this end more easily (*viz.*, to make good hussars of their men), officers must make their men ride every day, instruct them in everything that can be of advantage to them and bring them forward; recruits must frequently be mounted bare-back with the bridoon, so that they may learn to sit fast and get a good seat; after that they must see that the hussar always rides with short reins, so as to be master of his horse. When the recruits have ridden for some time bare-back, the officers will teach them to ride in the saddle, with stirrups and bit, and instruct them in turning quickly, halting and pirouetting. His Majesty desires that a hussar shall be so adroit as to be able, when his horse is at full gallop, to pick anything up from the ground with his hand and take off another man's head-piece. The horse of the hussar must be taught to respect the aids and forces brought to bear on the forehand, and made nimble in the hind-quarters, so that the hussar may be able to turn himself on ground no larger than a thaler.”

ART. VI.

“The officer must also take every pains that hussars know

how to handle their sabres well, so that they may possess all the advantages resulting therefrom, and will impress upon them that when they cut they must stand up in their saddles, so as to cut from above downwards. A cut so delivered is far more effective than when the man is sitting down in his saddle."

ART. VII.

"The attack on foot must be practised by hussars, so that if they are attacked when cantoned in villages during the winter, they may be able to provide for their own defence, and also may be able to force a post occupied by an enemy in a church-yard or other good position."

SECT. XVIII, ART. I.

"It is His Majesty's strict order that hussars be mounted every day, and that they shall every day trot and gallop; this tends more to preserve than to injure the horses."

ART. II.

"The three officers of the squadron must every day visit their district in order to see that their men groom their horses. The officers will afterwards report to their Captain if their horses are well looked after, and if they have any sick.

"N.B.—Horses must not be fed so as to be over-conditioned; they want marrow in their bones, not belly."

ART. XV.

"Every morning at half-past eight o'clock, whether it rain or not, half the squadron will parade mounted, and ride on the blanket; the other half of the squadron, similarly, at three or four in the afternoon.

"The Captain will not always ride at the head of the squadron, but sometimes in front, sometimes in rear, sometimes on a flank. On Sundays, after divine service, the men shall mount, as His Majesty considers it of the highest importance for the preservation of the horse that he should be ridden every day. The horses will then always be in wind, will not be stiff in the legs, and not get too fat. This His Majesty has found to be the case with his own horses. He desires to have horses in working condition, and does not care so much that they should be fat as that they should be sound and fit to march and stand fatigue."

SECT. II, ART. XVIII.

"The privates must be thoroughly instructed to be very attentive to the '*Appell*' sound ('Rally'), and each on this sound being given must with the greatest possible alacrity join his squadron and fall into his rank; in this case, as before laid down, it is not necessary that they should have the same man right and left as before, or cover the same front rank man.

"N.B.—His Majesty particularly insists that squadrons should be able to rally as quickly as possible."

PART II, SECT. I, ART. I.

"When a hussar regiment dismounts, the horses linked, and firearms shouldered, the men must clear themselves from the horses as rapidly as possible."

Here we find every moment such expressions as "as quickly as possible," "with the greatest rapidity," &c. It is evident from this that they moved much faster formerly, for the energetic powerful will was at hand to ensure the most punctilious observance of these instructions. Moreover, he who is quickest and readiest will get the advantage of the enemy. It would therefore be very advantageous if we took the above directions as a pattern in every respect, for we cannot be too quick to fulfil our task.

It follows from what has been written, that all that is now-a-days supposed to be new is on the contrary quite old, and we at the same time see how necessary it is to return to the old and proceed in the same spirit, to act in everything on the principles already laid down and explained, and in the interest of the service to give them new life. If this be effected, we shall very quickly and clearly see its effects in all the branches of our service, both in the means adopted and the results following them; thus much will be attained, for "success is the true stimulus in all undertakings."

The important effects of these views and principles will be especially seen in the instruction of our officers. They must be thoroughly instructed in everything, in the whole system of training man and horse, bodily and intellectual exercises, the formation and instruction of the squadron, tactics, &c.; for then only can they be equal to their position, take in the whole service at one view, and rightly use their influence in their respective spheres. When they are thoroughly imbued with these principles, and are confirmed in them by subsequent experience, they will be able to contribute to the consummation and perfecting of the whole.

The main point in all our work is, that there must be no inactivity, no indecision, no uncertainty; after calm conscientious reflection, we should carry out that which we have resolved upon with determination, and without any after-thought as to whether it be the best or not. That which is less good, or even altogether wrong, if only pursued with energy and decision, has always more chance of success than what is absolutely best, if the latter is carried out feebly, without decision and firmness. It is not so much a question of what is absolutely the best, as of how we put it into execution. The men, and very properly so, have no confidence in an irresolute, undecided leader, as he will always be unlucky and lead them into misfortune.

The success of our arm depends entirely on the resolute initiative and offensive; this must characterise it in all its proceedings. The horse, rapidity, and mobility, these are our chief weapons; after these comes the sabre. The firearm is only to

be used on horseback for signalling, and not even by scouts or skirmishers. An old cavalry maxim says: "He who can bring up the last formed body, will remain master of the field."

Herein lies the strongest inducement for us to develop to the utmost the individuality of our men, their bodily and intellectual aptitude. The horseman must be thoroughly master of his steed, be able with certainty to reach the point where he should be, and do this rapidly and dexterously; for this he requires a certain suppleness and agility of body, must be free and strong in the lower leg; while intellectually, all his exercises must tend to make him so quick and lively in thinking, so rapid in forming resolutions, and so vigorous in acting on them, that he can at once see where he ought to be and put himself there with the utmost speed.

Bodily activity and intellectual development here go hand in hand, as experience has shown. Never has this been so imperatively necessary as now. In the new tactics of infantry it is a fundamental principle that we must have the highest possible cultivation of individual independence, and development of the intellectual faculties, so that in the greatest disorder and dispersion each soldier may be able to contribute his share towards the realisation of the general scheme of operations, and to pass rapidly from the greatest disorder to the most perfect order.

The new tactics require the very same of us, only in a higher degree. It is a universally acknowledged principle, and one derived from experience, that cavalry whose instruction is not based on the best and most thorough individual training, and whose leaders are not good, is incapable and useless. This is not so true of any arm as of ours.

PART II.—THE SQUADRON.

CHAPTER 1.—PRELIMINARY CONDITIONS FOR JOINING IN SQUADRON AT THE COMMENCEMENT OF THE SPRING DRILLS, WITH ESPECIAL REFERENCE TO THE INSTRUCTION OF THE MEN IN RIDING.

EVERY squadron commander must constantly bear in mind the end to be attained, viz., to get his horses, without exception, into that form and condition in which the war-horse must be, and in which alone he will be obedient to the aids, active, lasting, capable of work, surefooted, and free in his paces, through which too he will be preserved for many years. This position of the well-broken horse must be attained by every single horse, not through being reined into this form or by the help of all sorts of accessory aids, but by a constantly developed impulse towards forward motion; by the effects of the supple and powerful lower leg of the rider; by the development of the motive power of the hind-quarters; by the light hand which only feels the mouth without hanging on the reins, which through breaking into the different paces frees the neck and cervical muscles from all contraction, so that the head is light, the lower jaw is brought in towards the throat and withers; by which alone can command of the hind-quarters, their activity, suppleness, and surrender be attained. Sufficient cannot be done in this respect.

Monsters and caricatures of horses, formed not by nature but by bad riding, must disappear altogether; they are the ruin of a squadron. On horses whose necks and heads are stretched out so as to appear a continuation of the backbone, and which will not admit of being collected in the slightest degree, on such horses no recruit can learn or acquire the proper feeling for a horse. Such horses come down on the slightest stumble, without being able to help themselves; on them no horseman can use his weapon with effect in the *mêlée*, and such beasts are in a very short time knocked up and fit for nothing. Again, horses that carry their noses high and nearly horizontal, that stretch out their necks or carry them too low, and are consequently hardly able to lift their forelegs from the ground, such as move in a cramped manner and stumble over the smallest stone, all such are unsafe, will soon break down in the forehand, become strained in the back and hind pasterns and wear themselves out when on service, for the very reason that everything is doubly hard for them as their hindhand takes no part in the work.

Finally, horses that always carry their noses low and hang heavily on the bit, that let themselves be held up by their rider, and march on their heads, or, so to speak, on a fifth leg, all such equally ruin themselves before their time, and become utterly useless for service, especially for single combat.

The more these misshapen horses disappear, and only such horses are to be found whose necks are properly drawn in towards the withers, who carry their necks and heads naturally, and do not hang on the bit, but stand up to it, in the same degree shall we develop riders with active and supple lower legs, the horses' haunches will be suppld, and the hindhand well brought under, and the animals will be more serviceable, lasting, and active. We can then carry out the exercises in bar-leaping and single combat without the bars of the horses' mouths being injured, and the horseman will be able to use his weapon with ease in all directions. Such horses do not stumble on the most trifling occasion, because they are in equilibrium, and the hind- assists the fore-hand when the latter trips; they have no strained tendons from work, like horses that march entirely on their forehands, and they remain fit for active work even at an advanced age.

On such horses recruits will easily learn to ride and acquire a good firm seat, with the lower limbs well stretched down; and thus will these young horsemen be able so much the sooner themselves to train young remount horses on the same principle, and to give them a similar position and form. What an infinite gain it would be towards our efficiency, towards the raising of the whole cavalry, and improving the state of the horses, if this were attained! It would be well worth all our diligence and energy. If we proceed in this manner, then it will and must happen that at the annual casting the squadron commander will be in doubt as to which horses he ought to cast, as they could nearly all be employed in the squadron for one or more years with advantage, so good and well preserved will the horses in question be.

But for this to be the case they must begin with the remounts and take the greatest pains in forming them; they cannot be too much trained, or be made too pliant, supple, and free; too much pains cannot be taken in their breaking, for on them the progress and efficiency of the squadron depend. The better the remounts are trained, the longer will they last, the better horses will the squadron have for teaching recruits, and so much the better and more quickly will the young soldier learn. The test of successful training is, that all the horses will be effective, none lame, all clean in the limbs, all free from blemish, all well-placed, necks bent, jaws drawn back; the paces will be even, light and free; and there will be no long and clumsy steps. This can very easily be attained.

Only by proceeding thus can the squadrons reach this standard in the state of their horses and the riding of the men; and this must be the very first consideration. The manner of

going depends entirely on the placing of the head and neck, and horses whose necks are not bent and drawn back towards the withers through the effect of the rider's leg, will inevitably break down.

Again, all the old horses must be worked up every year; in the spring, after the winter's work, the rider should not dismount leaving the horse in the same condition as when he took it over in the autumn; the horse must visibly and in a striking manner have changed his form and carriage, and consequently his paces, or the instructor and rider have not done their duty. If the horse has become handsomer and freer in all his parts, then is he also more useful and serviceable; these qualities go together.

The basis of all this is the winter training; for it is the seed-time, while the summer drills are the harvest. If proper efforts have been made in the winter, according to the true principles laid down, the results will follow of themselves in the summer, and both teacher and pupils will reap the fruits of their common toil during the winter; while the want of activity and the following of wrong principles in winter will produce their fitting return in summer, and these faults can never be repaired. In our arm, then, we must lay the greatest stress on the winter work, the time of training and preparation, the personal training of man and horse, which, provided it be always in strict unison with the one principle and logical system, cannot be too much individualised.

The next great aim of the winter's work should be to get the horses into the proper position, collect them, and bring them into equilibrium, to make them pliant and supple, and consequently handy and clever.

This is only to be attained by means of short lessons, short collecting and bending lessons, and not on the system of forcing the horse to obedience; otherwise the rider is strained and cramped, and consequently makes the horse move stiffly, whence also we arrive at the very opposite of what we want, viz., freedom from all stiffness.

In spring comes the second period for establishing the correct position of the horse, by carrying on the winter lessons. Now we have the exercises in riding straight forward, gradually accustoming the horses to increased exertion, and getting them in wind; to which end the lessons must be lengthened very gradually and systematically.

And then comes the third period, when we put into practice in the drill exercises all that has previously been acquired; when the position, collecting, and suppling of the horses, led up to by the previous individual training in the square and by aid of the individual rider, must be completed, as so rightly prescribed in the Regulations. There should be no exercises without previous individual riding, even if it only lasts half an hour, to regulate and re-establish the understanding between man and horse, and to improve the position of the horse. Nothing is to our mind so

necessary, both from a moral and material point of view, as methodical individual instruction; that is a lost hour in the riding school during which the riders have had no individual practice while the rest of the ride was halted.

By proceeding in this way, it will not be necessary to commence with the riding from the very beginning in spring, but we shall profit by what has been gained by the individual instruction and summer work, and so can obtain greater results in the winter months; we shall thus get continuous progress in the riding of the men and in the efficiency and position of the horses, which will fully satisfy the intelligent, energetic, and able squadron commander.

Here again a good eye and sound judgment are required to detect and correct those faults in riding which have such a pernicious effect. As a very general and almost constant fault, which is most injurious to the working, serviceableness, and preservation of the horses, must be mentioned before all things, the distorted sideways position of the hip of most riders, the drawing back of the left shoulder, left side of the hip, left elbow, left thigh and calf, through which the whole right side is thrown forward, and the right leg hangs down loose and feeble without any effect on the horse; to this must be added the prevailing tendency to carry the bridle hand towards the right, whereby there is more pull on the left bit rein than on the right, and the horse's nose will be placed to the left. In this way the horseman rides only with the left rein and leg, while the horses are all placed and bent to the left; owing to this the horses are naturally unyielding, hang to the left, and will not be turned to the right, spring towards the left when they ought to be turned towards the right, and swerve to the left before every obstacle. Among the direct results of these bad habits and of this incorrect position, the following must be especially pointed out.

- (1.) Wrong position of the head, horses are stag-necked, bull-necked, their necks are stuck out, noses are carried too low, or they are star-gazers.
- (2.) Paces irregular and not true; this, in passaging and shouldering is especially bad.
- (3.) The head is placed too much to the left; bad position of the head and bend of the neck towards the right, especially when using the bit rein.
- (4.) The horses break into a gallop to the right very freely, but the hind feet do not cover the same ground as the fore-feet (*travers-galopp*), which is very bad; they are misplaced, and have the nose too much to the left.
- (5.) They perform "Right Pass Shoulder Out" incorrectly, by bearing on the left shoulder, and being bent from the withers instead of from the jaws.
- (6.) They trot very badly and uncertainly to the right, and are very apt to break into a gallop.

- (7.) They yield with difficulty to the right leg in "Left Pass Shoulder Out."
- (8.) They trot truer to the left than to the right, still without keeping properly up to the left rein.
- (9.) There is a tendency in the croup to pass to the right, the performance of the near fore and hind feet, and trotting to the left, are faulty, in consequence of which the gallop to the left is unsteady and very difficult; no supporting of the croup by the right leg, which as inner leg, when working to the right, did nothing, and now, as outer leg, does nothing whatever. (This is one of the most common faults.)
- (10.) The horses stand in the ranks more or less turned to the left, instead of straight to the front as they should be.
- (11.) The men are thus utterly unable to march straight, to work on straight lines, or describe a right angle, which is so necessary to be done, but so seldom seen.
- (12.) In closing to the right, the haunches always precede instead of the forehead.
- (13.) In riding on the square, before turning to the right, the horses always throw themselves outwards, to the left; thus a serpentine is described instead of a straight line, and the square is irregular.
- (14.) Horses thus ridden swerve to the left at every shy, at every obstacle, and will not keep straight.

The trot to the right must be as true and regular as to the left; the gallop to the left should be as easy to the horse as to the right; in the latter, the croup should not be thrown inwards, nor should the horse gallop in two times. The Right Shoulder In and Left Passage must be perfectly true; horses must trot correctly to the left, and feel the left rein; they must advance the near hind foot freely and not keep it back; the circles to the right at the gallop must not be too large, nor those to the left too small; they must not form to the left too often, but should more frequently form to the right; the left rein, when it is the outward one, must not be held too tight; and the right rein, when the outward one, must be held more tightly. If the hips have been brought square, and riding on the bridoon with one rein and one leg has been stopped, an immense amount has been gained, and we have altogether eliminated horses that will not move on with the pressure of the leg, those that are restive, cling to the ranks, kick and rear. They kick only on account of the pressure of the leg, to which they are not accustomed, which they have not before felt, which has allowed them too much liberty in a sideward direction, and which they consequently do not respect.

The instructor should always abstain from exercises which come naturally and easily to man and horse, and should insist

on those the execution of which is faulty, for then the defect will not continue long; the effort of the rider to conform to the instructions given him produces the effect desired. The instructor will insist strongly on greater use of the right leg and the position of the horse towards the right, and make especial use of those exercises which strengthen the right leg and cause it to come more into play, such as Right Shoulder In, Right Contra Shoulder In, Left Pass Shoulder Out. Thus that which is necessary will be attained, and a quick eye for the discernment of these faults be cultivated. The first condition for riding straight forward is to ride with both legs and on both reins, and not with one only. One of the legs, the outward, is passive; the inward leg has an active, living power, and it is that which urges the horse forward. The outward, lifeless leg, does nothing, but a flexible knee-joint and lively lower leg are requisite. When the horsemen no longer hang on to the reins to keep themselves from falling, know how to use their legs, the foundation of all riding, there will be no more restive and disobedient horses that will not go on, the propelling power of whose hind-quarters is not developed; there will be no more horses clinging to the ranks; for all these faults have their common ground in the cramped inclination of the horse to move, and the want of forward propelling impulse. This impulse, on which all depends, must be kept up during the whole training at the slowest and most collected paces as well as in the lessons at rapid paces, and must indeed be constantly developed by individual riding. The horses then must be ridden as little as possible with the hand, but as much as possible with the leg, with equilibrium and right distribution of the weight in all movements, turns, &c. The instructor cannot pay too much attention to this.

When this has been attained we shall see no more of the constant reining back of horses in the ranks after halting, when sometimes whole squadrons rein back, a most uncavalry-like proceeding. If during the riding instruction in the school all instructors take care that the horses are pressed forward at first when moving off from the halt, this objectionable reining back will be prevented, the horses will be brought more on the reins, and riders will use their legs more, which is of the greatest importance in subsequent riding in the ranks.

For the rational training of the horse, the following principles should be rigidly adhered to, otherwise nothing will help us, and we shall arrive at no result:—

1. Every man receives a horse on the recruits joining; he tends and rides this horse for a whole year, until the next batch joins; he thus does not change his horse at the end of the winter half, but rides it in the spring and summer; he takes care of no other horse but the one he rides.
2. Every man and every horse remains in the riding class in which he was placed at the beginning of the winter,

under the same instructor, so that the latter may take an interest in him and be responsible for the result of his training.

3. All remounts, without exception, must be thoroughly trained (provided they are not injured thereby), and be able to take their place in squadron in the spring under the men who have mounted them in the winter. There must be no exchange of remounts after the commencement of the spring drills; they must have no fresh rider, which would be most injurious; for how is it possible that a young horse which is not yet sufficiently confirmed in his position and paces, which has only as yet been ridden in the closed riding school, should carry himself well, go freely, and do good service under a much worse rider in the open, under much more difficult circumstances?
4. Harm is done by drilling with weak numbers; in this way imperfectly trained men and horses are remarked, which does not place the squadron in a good light; this is most injurious to the squadron, which will never be well trained in this way.

In the interests of the squadrons themselves this principle must be attended to, even if it costs more work in winter, as the riders must be better trained; but one is repaid a hundredfold in summer. The only exceptions admissible are such as are caused by absence or prolonged sickness.

In this place another important point must be alluded to; the appearance of man and horse should give the impression that they belong to one another; it should be impossible, so to speak, to imagine that any other man could be on the horse, so thoroughly should they appear to be identified with each other. An experienced horseman, whose eye is practised in this, must receive this impression; he recognises the relation between man and horse, and judges whether the squadron leader has judiciously apportioned the horses to the men, a matter in which he cannot bring too much discernment to bear when forming his squadron in the autumn. This is certainly a great art, on it very much depends, and the leader hardly ever masters it thoroughly; it depends, however, on certain fixed principles, and can be acquired by systematic method. The principles to be observed are as follows:—

First of all, the weight of the rider must be considered in connection with the carrying power of the horse (back, strong loins, broad quarters); then the length of body and leg of the rider, remembering that all the men should, as far as possible, sit at the same height above their horses, and their legs should be at the same level below the horses' bellies. Thus, for example, no rider with a long upper body should be mounted on a horse with short neck, or on a very straight or roach-backed horse; nor one with a short upper body on a horse high in front, or that

has a deep or hollow back; nor a man with long legs on a leggy horse with small carcass. All this not only offends the eye, but is also detrimental to the riding, to the proper action of the man on his horse, on which everything depends. These instances are perhaps exaggerated, but from extreme cases we see more clearly the rules to be followed. Next to the natural build of man and horse we must take into consideration their temper and character. The principle should be to put quiet riders on mettlesome horses, and energetic riders on quiet ones. In the next place the riding powers of the man must be borne in mind when choosing a horse for him. Further, we must include in the reckoning the age of the horse, observing that an older horse must be more considered, and carry less weight than a young one, even if it has a stronger back; their condition will gain by this.

If the squadron leader follows out these principles in a rational manner, he will not fail in time to acquire the natural tact and eye required for apportioning horses to the men; too much value cannot be given to this, and it is necessary to gain the conviction of the importance of the matter itself both as regards the instruction and final result, and also of the amount of attention and reflection by which alone the practised eye can by degrees be acquired.

If, as before stated, the winter is the proper time for training and preparation, riding with the saddle-cloth* and bridoon is the basis of all equitation, because it alone gives a firm and independent seat, and the action of the light snaffle is direct and gentle; the rider acquires the feeling of the horse better with the saddle-cloth than by sitting on a saddle tree, which is least suitable for instructional work, not only because of its removing the seat of the rider from the horse's back, but because the hands are placed so high, and the long unyielding bars of the tree are liable to hurt the horse on the circle and in bending motions, thus causing it to be refractory. Riding with numnah and bridoon, then, cannot be carried too far, and the best results of training will be obtained in this way; all collecting and bending lessons, including the collected canter, must be gone through in this manner. No riding instructor should have recourse to the more severe bit to acquire (*e.g.*) the collected canter, which indeed is only a means to the end, that of suppling the haunches and getting the horse more collected.

Under ordinary circumstances it will be advisable to subdivide the period of winter training thus;

To January 1st, numnahs and bridoons.

To February 1st, saddles and bridoons.

To March 1st, bits.

From March 1st the men should ride with arms, but not earlier. During the month they may sometimes ride with bag-gage, arms being occasionally dispensed with.

As already insisted upon, the best of all training for the horse

* *i.e.*, blanket, here translated numnah.—Tr.

is with the simple bridoon, for the direct influence of the gentle snaffle enables the rider to act much more thoroughly on the poll and every part of the neck, with much less danger of cramping and spoiling the horse, or of rough handling, than is likely with the strong leverage of the bit, which can never be too light.

Consequently too much pains cannot be taken during this period of the training, for on the results then obtained with regard to the placing, carriage, and biting of the horse, the suppleness of the hindhand, his equilibrium and collectedness, depends our efficiency during the summer period. On this account, and as with unskilful treatment many of the good results obtained by the bridoon will be negatived, it is well, during the first period when the horse is bitted, to ride every other day with the bridoon, especially the remounts of the preceding year, in order to counteract any bad effects and resistance caused by the bit; again in the later period and during the summer, it is well to work at least once a week with only the watering bridle, which will have a good effect on the feeling and mouth of the horse. In addition, it may be remarked that it is most excellent practice for a squadron that can do it, to go through all its drill with only bridoon and numnah, the same as is required with bits and saddles; and a squadron in which the foregoing principles have been adopted, which has drilled thoroughly and conscientiously with the bridoon and not trusted to the bit, will very easily be able to do this.

Such horses and whole classes as have not attained the desired result by the end of January, must be kept on the bridoon till the object is gained. Any apprehension that they will not be ready by spring is groundless; for after a thorough preparation with the snaffle, the succeeding period of training can be considerably shortened without doing them any harm. To this category would belong all horses whose heads and necks are not yet properly placed, whose polls are not yet suppld, which carry their heads too high or too low; horses which do not take the position to the right, and bend to the right from the withers instead of from the poll, which consequently show no gentle bending of the throat under the off jaw and no wrinkling of the skin there, but in breaking off to the right throw out the muscles of the throat towards the right, a very common fault; horses which cannot yet gallop collected and short to both hands, without effort, the haunches well under them, but which either can only gallop at half pace, or canter on the forehand with high stiff hindhands; both are equally bad, and the collected gallop on the bit is of little value; lastly, such horses as cannot without difficulty circle to both hands at the gallop.

If we adopt this standard and determine to attain so much with the bridoon, we shall make as great progress in riding, in the training of the horse, and fitting it for active service, as has been made in many other departments, such as gymnastics, and the tactical instruction of the squadron, where it is much easier

to obtain results on account of so much experience not being required. The least progress is as a rule made in this so important branch of horse-training, and this results from the fact that it is most difficult to get people to understand the matter, the Anglo-mania and love of cross-country riding have done so much harm, and good riding instructors, such as made a business of it and gave an example which the other officers copied, are becoming scarcer and scarcer. Still it is there that we require progress most, since our efficiency, the bottom and preservation of our horses, their handiness and obedience, their sureness and the freeness of their paces, as well as the training of our men in equitation, entirely depend on this.

It would be a great mistake to assume that freeness and lasting power at rapid paces can be obtained by frequent and heavy work at such paces, that quick trotting can only be acquired by rapid working at that pace, and similarly of the gallop, and that these paces should therefore be frequently practised, and long continued, in the school and square, and in individual riding, during the training period. One cannot too strongly oppose these views or prevent such theories from being put into practice, for such a mode of proceeding would only render our arm useless and rapidly and prematurely ruin our horses; the latter would hang heavily on the bit instead of being well up to it, they would be stiff in the poll, and have their necks stretched forward; the hindhand would be high and stiff, the forehand thus doing all the work and thus being soon broken down. Moreover, the required freeness, sureness, and bottom in these paces will not be acquired by much practice in them during the training period; the way to get bottom and sureness in summer is simply to practise collected riding during the winter training period, not for the purpose of saving limbs and lungs for the increased exertions of the summer, which would be a very false reason, but to form, collect, and bend the horse, to make him supple and in equilibrium, to regulate his movements and paces by eradicating all constraint and contraction, especially in the poll and muscles of the neck. The horses ought not to rest; their form should be more adapted to riding purposes, their carriage improved, and their whole constitution rendered more fit to support the exertions that will be demanded of them, without injury to wind or limb.

The apprehension that the horse's going will be spoilt by collected riding in the winter, that he will move less freely and have less inclination to move forward (the main thing, which must be developed more and more by training) is entirely without foundation, provided that the men ride with a flexible knee and make use of the lower leg, not riding with the hand, and provided that in the collected paces they always employ the proper means of obtaining forward propulsion, the leg, that the rider never holds on by the reins, never works backwards, the impulsion being always from behind forwards. If we proceed in this manner, we can work for months on the bridoon at col-

lected paces and side movements only, and the best results will appear when we proceed to the gentle trot. The horses will then move their shoulders and use their knees in a very different manner, they will lift their feet much higher, and their step will be more free and elastic; they will cover more ground, if the riders will only give them their heads sufficiently; for they will then carry themselves, they will not hang on the reins, *march on the fifth foot*, they will bring the haunches much further forward under the centre of gravity, and thus assist the forehand, which will now have full play for the shoulders. This is so generally misunderstood. When an intelligent and attentive instructor sees that notwithstanding his instruction some of his class begin, in the collected paces, to ride with their hands (that is, backwards), hang on the reins, he ought to let them trot and trot out occasionally, in order to restore to the horses that freeness and impulse for movement which have temporarily been cramped. But this does not militate against the principle, for in the best systems errors will take place in practice, and the instructor is there for the very purpose of detecting them betimes and energetically remedying them.

The fault in question shows itself very plainly in the lifeless gait of the horses, in the way in which they drag their feet over the ground, in their high hindhand and diminished action. The habit of trotting the horses at the beginning of the lesson, for "take it out of them" as it is called, is useless and pernicious.

The riding lesson is unfortunately but short, and time is precious; the instructor therefore should begin to work at once to get the riders more down to their horses, prevent their being stiff and lifeless, without any influence on their steeds; he must see that they make the best use of their time to bend and collect their horses. When a man has been got to do anything on horseback, the instructor will soon succeed in making him do something good and useful; stiffness, indifference, and want of sympathy, must be made to disappear. Nothing is worse for the whole training than when the rider is quite passive, allowing himself to be jogged round for hours at a natural trot; nothing will ever be arrived at by this theory of tiring the recruit out, but much more can be done by carrying out the principle laid down, viz., activity, especially of the lower leg, short spells of drill, collected movements of short duration, and the abolition of the so-called natural trot. This natural trot should only be allowed in the case of remounts as long as they are yet unable to execute the medium trot (*mitteltrab**), say for three or four weeks after joining; it does no good, accustoming the rider to lax inactive ways, does not develop the impulsion of the horse or the play of the hindhand. The fresh medium trot would be much preferable as a preparation for training, as it at any rate stimulates the action of the hindhand and brings the horse up to the hand; but it is better that this trot should be

* This is the regulation trot, or trot of manœuvre.—Tr.

the product or result of the collected paces, as it will then be much more perfect and roomy.

Theories based on the conditions required by modern tactics, the greatest development of rapidity (which some would obtain by frequent and long-continued practice of the full gallop in the riding school, turning it into a racecourse, instead of employing it for the proper placing, collecting, and bending of the horse and regulating its paces), such theories are the principal cause of the falls of horses in the field. Figures have their value here also.

In a squadron where falls are frequent, there is bad riding; the horses are trained on false principles and not properly collected; this is a perfectly logical conclusion. When horses are ridden by the reins and hang on them, when the poll is stiff and fixed, and the hindhand is consequently unbent, intact, and not brought under the centre of weight, when in a word the horse is not balanced, he is incapable of helping himself with his hind limbs when his forelegs stumble or trip at a quick pace, which in such unfavourable circumstances not unfrequently happens; for the same reason the rider is unable to assist the horse by a slight check; the horse then, entirely losing his equilibrium, owing to his faulty carriage, must fall on his nose. This will happen in an especial degree in a squadron whose horses are trained on this principle, when it goes at full gallop over heavy deep ground; the horses that are not balanced will fall forwards. This is the sad result of the theory above mentioned, and all who wish their arm well cannot oppose the false principle too strongly.

The war-horse must admit of being collected, and must also be able to launch out without getting out of position, or out of his rider's hand; he must, therefore, be able to carry the weight either on the hind or fore hand; on this account it is necessary to practise on the bridoon the movements for collecting him and the collected canter with the haunches brought well under, as a means to enable him to move at the steady and full gallop with safe bearing and capability of turning rapidly. Great attention must be paid to developing the latter pace and confirming the horse in it, as it is of special importance both to horse and rider. Above all, the haunches must be well brought under and suppld, and the rider must sit firmly in the saddle and keep his legs still; he must on no account be shaken about in the saddle. The gallop, even if the command be given when at the walk, must always be begun with the collected trot, although only a few paces may be executed at the trot. The three kinds of gallop must be clearly distinguished from each other, and the men must thoroughly know and be able to feel their paces. Great importance must be attached to the development of the muscles of the horse's back, which will result from the gallop. As a matter of course, the full gallop will not be practised until the horse is thoroughly prepared for it with respect to pliancy of neck and confirmed position and carriage; then too long bouts at this pace will not be required. The require-

ments at the gallop will be very gradually increased by working on the drill ground on straight lines, the men riding at good intervals apart.

The advantages to be derived from a rational and systematic winter training with the bridoon only are incalculable, both as regards the efficiency of the horse and his preservation, especially that of his forelegs.

As to the part of the winter's training that is apportioned to March, riding with arms, every care should be taken to preserve and confirm the position of the horses, on which alone their obedience, handiness, safety, and lasting power depend, and to give the men the highest possible individual training as intelligent sympathetic riders. The time should principally be employed in improving the suppleness, position, and collecting of the horses; the riding with one hand and drawn swords, &c., should only occupy a small portion of it. This especially applies to lancers, as the handling of the lance is a great hindrance to the training of the horse. Time spent over the latter will repay itself twofold, if all the men have their horses thoroughly in hand and in good confirmed position, and only when this is the case can they possibly use their arms properly.

If we attempt to acquire skill in riding and in the use of weapons at the same time, we shall arrive at no result, as is always the case if one does not proceed systematically, or mixes up one thing with another.

During this period, too, some time must be devoted to individual riding, as more time can now be spared for it; and in order to accustom the horse to it gradually, it is well to ride on alternate days in the school and in the open. The great affection some horses have for their stable, which one notices so much in the spring when beginning to work in the open, and which with bad riders is the source of trickiness and bad habits, thereby becomes moderated; and moreover, by alternately working in the school, the collected position of the horse is better preserved and developed. In this way the transition period will best prepare for the summer work, during which the divisions into riding classes are still kept up, for only thus can the efficiency of the horses be maintained, and real progress made in riding.

After the completion of the winter's work, about the 1st April, one proceeds to individual riding in the open, on straight lines and right angles, which will always be preceded by previous preparation of the horse in the square. Particular attention must be paid to these exercises, as they are of great practical consequence, and demonstrate whether the horses are ridden equally on both reins and with both legs, or the left leg and left rein are still predominant. These exercises are therefore a criterion for the value of the winter's training, and show whether the instructor has a correct eye, and has followed the system which alone leads to the desired end, or if he is deficient in these qualifications for a good instructor.

After devoting about a fortnight to this work, squadron drill would have to commence, and it is very advisable to let this always be preceded by some training in the square and in individual riding, according to the classes adopted in the winter. In this way the riding will be not only kept up but improved during the summer half year. The men will keep a good seat, well stretched down, will become more and more adroit, and will be steady in the ranks; the position and paces of the horses will be improved and confirmed, and the good understanding between man and horse will be maintained and not altered by the drill; the squadron exercises too will gain by it, owing to man and horse being well trained and in the usual relation to each other. There should be no break in passing from the winter to the summer training period, but rather there should be a development and perfecting in summer of that which has been learnt in winter. Only by proceeding in this way will the horses gain in usefulness and efficiency.

Besides many other great advantages this method renders it unnecessary to begin all over again in autumn, but we can improve on what we have already learnt and make real progress in riding, both as regards the equitation of the men and the handiness of the horses, their proper position, the regularity of their paces, which will have important influence on the preservation of the horse. Above all things it is necessary that the horses should not be changed at the end of the winter's work, but each man must keep the horse he has ridden and trained during the winter; in this way much progress will be made in riding and in the training of the horses, not only as regards the remounts of the previous year, but all the other horses. All such exchanging does harm to the riding and position of the horse, as well as to the tactical instruction of the squadron and the exercises with arms; it moreover makes the work to be done really longer instead of shortening it. Of course the squadron chief will not permit a man who has been unsuccessful with his horse to change it at once, which will cause many other changes to be made; he must take the more troublesome course of pointing out to the rider what remedy he should adopt, getting him out of the bad habits which have had an evil effect on the horse, and making him more adroit; the horse, hitherto stubborn, will now be quite another animal, tractable and obedient. This, as also the leaving of each horse to the rider who has mounted him in the winter, and the individual training of man and horse even in the summer half year before each drill, can easily be done; and a squadron chief who makes this his fixed rule, if he be fairly intelligent, will reap the greatest advantage from it, as he will know much better how the men ride, the equitation of the men, and the handiness and efficiency of the horses will be enormously improved, and the quality of his horses will advance year by year. Even with our three years' service, which certainly increases our work in no slight degree, it is still possible, if one proceeds in the proper manner,

to make considerable progress in the training each year; this alone can interest an intelligent and active squadron chief, and will take the place of that incessant mechanical yearly routine, by which we know beforehand that we can only reach a certain point and never get beyond it.

CHAPTER 2.—PRINCIPLES RELATING TO PACES AND DIRECTION.*

Rhythm, or rate of pace, is the foundation of everything, both in the training of the horses and for the preservation of order in squads, zugs, and larger bodies; distance and dressing in the ranks must be made to depend on it alone.

The times laid down for the different paces must be accurately adhered to in all evolutions, without the slightest variation. There must be no dressing by eye when in movement; it must be kept entirely by riding straight at the proper pace and by feeling. Where every one rides at exactly the same pace, there is good alignment; but where men dress by the eye, we see only individual riders and constant checking and hurrying up, which ruin the horses. Only at the halt should there be dressing by the eye, and even then it should be more from the front, in the way of distance, than to a flank. That squadron rides the worst in which there are frequent variations of pace resulting from attempts to make up for faults committed, thus causing the faults to take still larger dimensions. In line care must be taken not to diminish the pace, and in column not to increase it, as frequently happens; there is only one rate of trot and one of gallop. Different bodies of troops in large masses should on no account be permitted to vie with each other as regards pace, and the latter should be regulated on the drill ground by the seconds-watch, and measured distances on the ground. No deviation, either in increase or diminution of pace, should be allowed on the pretext of correcting mistakes; it is only by adhering to the proper pace that the faults can be prevented from extending to other bodies. Pace alone furnishes a sure foundation for all our movements.

The rate of pace of the trot and gallop should be perfectly known by all, and it should become a second nature to every man to *feel* the pace.

The principle of dressing by pace instead of by eye has a great influence on the preservation of the horses, as if strictly carried out there will be no losing distance, and no alternate checking and hurrying at irregular nondescript paces to make up for faults.

* It has not been considered advisable to translate the whole of this and the two following sections, as they are perhaps of less importance for the English reader than subsequent parts of the work; the rest of this chapter is therefore merely a *précis*.—Tr.

In field movements, &c., each body should move independently at the proper pace; thus in movements from column, the rear bodies shall not wait for the leading one to move, which will only produce change of pace in rear to make up lost distance.

At the full gallop the men may glance right and left occasionally merely as an assistance, a guide as to whether they are keeping the right pace.

On the sound "*Halt*," every one must stand fast; there must be no shuffling to regain one's place; it matters not where a man is, there he must stand fast on the sound "*Halt*."

To get the horses in wind for long distances, the work must be increased very gradually. The appetite of the horses is the best guide. At first the trot will not be exceeded, and it will be daily increased in length; 50 paces extra every day will perhaps suffice.

Every care must be taken that the men are steady in their seats, and the horses perfectly calm in the gallop. No charge should be executed (at drill) until the leader sees that it will be done calmly. The rear rank must be kept strictly at their distance, as otherwise the horses lose their calm. In the charge care must be taken that the men have their horses thoroughly in hand, and do not allow them to rush like an avalanche. When several charges have been made during a drill, it is advisable to perform a movement at the gallop, as if intending to break into the charge, but to terminate it by the trot instead of the charge; if this be practised, greater calm will be obtained at rapid paces.

By gradual increase of the work the horses will be able to cover 600 to 800 paces at the full gallop, without any fear of the men breaking into the charge without the orders of the leader, or of the horses doing so against the will of the men; the latter will occur if the full gallop is not perfectly calm and regular, the ranks being distinctly preserved.

CHAPTER 3.—LEAPING.*

The greatest attention must be paid to the practice of leaping in closed ranks and individually, this being so necessary, not only as enabling the men to take obstacles with safety and quietness when working together in field movements, without the ranks being thereby disordered, but also, which is of greater importance, as tending to make the men bolder and more resolute riders. If the following principles are conscientiously adhered to, leaping will not have any deleterious effect on the horse's limbs. The leaps should be gentle, quiet, not higher

* The sections of this chapter relating to individual riding, use of arms on horse-back, and individual combat, have been omitted.—Tr.

than is necessary, and should not require violent exertion. There will then be no refusal on the part of the horse, and no contest between the rider and his steed, which always makes the leap spasmodic and violent, causes the rider to shift in his saddle and hurts the horse's mouth and back on alighting, the remembrance of which makes the horse refuse the next leap. No progress is made by this contest and violence, on the contrary ground is lost; we must proceed in a rational manner if we would arrive at sureness in the leap, and would give the horse confidence. By attending to this principle we shall not have the horse rushing at obstacles incontinently and violently, which is so prejudicial to the individual horse and to the riding of the rank; for when horses throw themselves blindly on obstacles, not only is the good order of the ranks destroyed, but they are very likely not to take off properly, and thus to fall over the jump, rendering it impossible for the next rank and zug to leap, and causing great delay and the utmost disorder. In short, by following out a rational system of instruction in leaping, the grave and frequently observed fault will be avoided, that of the horses taking their leaps somewhat sideways inside of going straight at them; this is a frequent cause of the horse's falling, as the leap is then always uncertain, and at close files he thus pushes the next horse out of his place, and prevents his leaping. I have remarked that many horses have the habit of inclining to the left while leaping; this can best be remedied by making them incline to the right just before the spring.

In what precedes I have mentioned the faults most commonly to be observed, and I now proceed to the conditions absolutely necessary for the leap.

1. The horse must spring with certainty, not feel any tendency to refuse the obstacle, but go up to it resolutely, and with perfect confidence, without any hindrance on the part of the rider; and as the latter's nerves must first be accustomed to it, it is well to make several men leap at the same time at the gallop, taking great care that the horses do not rush at the obstacle.

2. The horse must go perfectly straight at the obstacle.

3. The horse must not rush incontinently at the obstacle, but be thoroughly in his rider's hand, and maintain a steady pace.

4. The spring must be gentle, supple, and calm, not spasmodic or violent, and not higher or longer than the obstacle requires; such a spring preserves the horse, a spasmodic one ruins his limbs.

I lay it down as a primary condition that no force must be employed in leaping; above all, the riding school whip must not be used. All violent measures do the greatest mischief, they destroy the confidence of the horse, make him timid, and cause that contraction and constraint which ought to be totally absent. Such measures are not calculated to give the horse certainty, or a liking for leaping, which is the very thing to be aimed at. He will then rush nervously and spasmodically at the obstacle, and

spring too high or too far, or even fall over it, and the next time he will not face it at all.

The longe is the only means of correcting the horse that should be used.

At first the horse's shyness of the obstacle in the riding school must be overcome by quiet, temperate, and kind treatment, and he must be brought up to it (unmounted) and allowed to go over it repeatedly. He must then be mounted, and made to go quietly over the bar, placed on the ground, at first at the walk, and afterwards at the trot. When the horses ridden to both hands execute this quite easily, both in squads at proper distances apart and singly, the requirements may be very gradually increased; at first taking them at the trot over the bar placed very low, the horses following each other at a good distance, and afterwards working singly, and so gradually increasing the height of the bar. It must be a fixed principle to leap the horses always on the bridoon, at the trot and to both hands, at first in classes and afterwards separately. Particular attention must be paid to regulating the habits of the horses in leaping, especially observing that when working to the right they do not throw their haunches inwards (away from the wall) just before the spring, and do not throw the forehand inwards when working to the left; these are very frequent faults, and are the cause later on, when leaping in the open, of the horse's either leaping sideways or refusing altogether. To the right, the rider must use his right leg more strongly; while when working to the left he should feel the right rein on approaching the obstacle. In this way the horse will keep up the run, and get the habit of judging cleverly when to take off, which is so important to acquire. This will always be the case if the instructor insists on the riders giving the necessary impulsion with the inward leg, and thus keeping the horses well up to the snaffle, never attempting to raise the horse with the reins, but keeping the hands perfectly still. In the next place the instructor should be most particular that, even in the lowest leaps, the men take a stronger grip than usual with the thighs and knees, and sit close, so as not to be lifted at all out of the saddle during the spring; men fail very much in this respect, and the result is an involuntary riding on the reins; this is simply a consequence of the rider being shifted out of his saddle, and leads to horses being deterred from leaping which at first jumped very willingly and surely. The rider must on no account be allowed to stoop forward, or look down during the leap. When the leap has been thus practised to both hands at the trot, at first in squads at considerable distance, and afterwards individually, the horses will be fit to leap in the open. Of course leaping must be practised during the winter, in each period of instruction, both on the numnah and saddle with the bridoon, and on the saddle with the bit and arms, at all paces, so that there is no rushing at the obstacles, or getting out of the rider's hands.

Horses will not be leaped in the open until they have prac-

tised in the square, and are thoroughly in hand and free; they will at first be made to leap without a rider, care being taken that the man who longes does not jag the horse's mouth, either during or after the spring. Horses must take the middle of the obstacle and spring quite straight over it, and this must be borne in mind when they are leaped mounted. If a horse, owing to the want of skill of his rider, bends towards the left during the leap, the rider should be made to trot him on the circle at a lively pace to the right just before leaping, and analogously if he bends to the right; but when leaping the horse must be perfectly straight. We should always bear in mind that the rider alone prevents the horse's leaping, either owing to fear (which is generally the case), or owing to his bad seat or improper application of the aids, the commonest faults being stooping forward, looking down, and pulling on the reins. When these faults are absent, horses will leap of their own accord; but above all it is necessary that they should have a leaning on the bridle, and be decidedly pressed forward by the thighs and legs.

When all the horses leap with certainty and satisfy all the requirements, they may begin to leap in close ranks. At first they should leap in sections of three, then of six, and then in zug, rank entire. Care must be taken that the rank opens out the least thing right and left for the leap, and that the men do not ride too close, the flank-guides giving a little outwards. Horses must on no account be allowed to leave the rank, or rush, but all must maintain a quiet medium trot. The obstacle must be so wide that the ranks, after allowing for some opening out, have room enough, so that all the horses take the leap. When this has been thoroughly acquired in single rank, the leap will be practised by zugs in two ranks. In this the rear rank must maintain the original pace, while the front rank, on the zug-leader's command, "*Block*" (wooden paling), "*Bar*," "*Ditch*," &c., slightly increases the pace just before reaching the obstacle, without, however, rushing; the rear rank thus gets sufficient distance for the leap. This increasing of the pace by the front rank is more suitable than the checking of the rear rank, which has hitherto obtained. After the leap the front rank resumes the original pace.

When zugs have learnt to leap correctly in single and double rank, they will soon be able to take obstacles by zugs with certainty, and the whole squadron can leap in zug column. The front ranks, on the zug-leader's command, "*Bar*," &c., will press forward only so much as is allowed by the rear ranks of preceding zugs. In this way the distance between units (zugs and squadrons) and tactical order will not be lost, while the necessary freedom for the leap will be obtained. The standard for judging whether squadrons and regiments leap well is this, that the different bodies after taking one or more obstacles continue to move with perfect cohesion and calm, and can perform tactical movements with the same precision as before, the obstacle making no difference to their manœuvring power.

This must be the object constantly kept in view by all of us. If horses are thus properly and systematically trained to leap, there will be no more falls or injured riders; for we may accept it as a fact that where many falls and accidents occur, the principles now exposed have not been acted upon, but a false system has been adopted, and force used. Still many people are of opinion, and we often hear the assertion, "What does it matter, so long as the horses get over the obstacle?" But it is of much less importance that they happen to get over it, than that they should always leap with certainty and facility, that their spring should be quiet and elastic, that they should have their limbs thoroughly under control, should be able to measure the leap correctly, should be sure-footed, maintain a regular pace, keep in equilibrium, and not be irritated by their riders.

To arrive at anything like certainty and security in the mass, and make the horses really serviceable, we must train systematically; otherwise our labour will be mere patchwork, and we shall be leaving everything to chance.

While of opinion that it is not beneficial to leap horses more than twice in one day, I yet hold that they should jump *daily*, whether singly or in ranks, so as to thoroughly accustom both men and horses to leaping, and to make it a second nature to them.

In general at riding drill, bars, barriers, hedges, and hurdles are much more used than ditches, although the latter are of much more importance, as being more frequently met with in the open than hedges or barriers. This is probably owing to the fact that artificial ditches, where much leaping is practised, are very difficult; the edges become worn away and the leap thereby rendered unsafe; but, notwithstanding this, the leaping of ditches must be practised more than that of barriers, and I would recommend lining the edges of the ditches with fascines, and covering them with earth; the ditches will thus be better kept, and the edges will not wear down.

With the view of preserving the horses, it is not advisable to leap, in compact order and as a frequent drill, fixed obstacles of more than 3 feet in height, or ditches more than 6 feet wide; but I must distinctly protest against the use of obstacles that are too low, and over which the horses merely step without springing; such obstacles afford no exercise either for man or horse, and they ought to be practice for the former and their nerves. Horses jump walls well, and I recommend that they be built; while, for their preservation, and to prevent the horses' feet being hurt by their sharp corners, it is advantageous to fix a plank on the top, with the edges rounded off. When the obstacles are long enough for a fair zug front, say 20 to 22 paces, it is not necessary to have wings at the ends to keep the horses in. These appear to me to be a certificate of poverty; they show that external means have to be adopted for ensuring that which the rider ought, but is not able, to do himself. It is very advantageous to erect an obstacle in the middle of the field day

ground, so that the whole body, or only portions of it, may have to take it during the evolutions, and the men may become accustomed rapidly to resume order after passing it, just as occurs on real ground. I know from experience that the certainty and rapid and exact execution of the evolutions will not be thereby diminished, while it tends to induce bold and resolute riding, and working on the drill ground is thus brought to resemble more closely riding in the field, which appears to me to be an advantage.

Finally, I must most strongly recommend the erection of obstacles that have to be climbed, mounds with steep sides, or very wide ditches, or deep ditches with steep sides, as climbing through and over such obstacles is excellent practice for men and horses. Such objects are frequently met with in the field, and it is therefore very necessary that the horses should be accustomed to them, and be able to cross them cleverly and quietly: moreover, it costs them much less exertion to climb over them than to leap clear of them. This exercise, too, is equally necessary for the men, in order to give them the required practice and make them adroit in guiding their horses and preserving their balance under such circumstances; for they are generally to blame when their horses fall, as they lose their proper balance, and consequently hang on the reins, and cause their horses to lose their equilibrium. The rider must learn to lean backward when going down steep descents, and forward when rising, to give the horse his head, to hold on by the mane, to guide the horse quietly, on no account to irritate him in his movements, and to assist him as much as possible in going over difficult ground by regulating his own balance.

CHAPTER 4.—MANŒUVRES.

a. INTRODUCTORY REMARKS.

The tactical instruction of squadrons cannot be conducted in too systematic and rational a manner, so as to stimulate the true cavalry spirit and ensure the men taking a lively interest in their work. Strong passion alone, when associated with systematic instruction can effect anything, and bring about results which will amply compensate for previous labour. The maxim especially applies to our arm, "He who does not work conscientiously and thoroughly, had better take to another trade."

The squadron is the tactical unit, the foundation on which depend the order, accuracy, and cohesion of the whole. This principle must always be kept in view during the instruction; and we must constantly bear in mind that the riding is the same in the regiment, brigade, and larger bodies as in the single squadron. This can only be arrived at by strictly following out

the fixed principles on which are founded the instructions in manœuvring, and the directions for movements in general, and for particular evolutions, as laid down in Secs. *b* and *c* of this chapter. It is only by attending to the principles there prescribed that squadrons will be fit to manœuvre together without continually changing their normal pace and the direction at first given to them, and without having to violate the first principles of cavalry manœuvres in order to correct their mistakes. The squadron, however, is frequently not so instructed, and consequently the most serious faults ensue in the manœuvring of the regiment. One wonders much at this, having considered that the squadrons were particularly well trained; as a matter of fact, such was not the case. It is only to the layman, who does not go to the bottom of things, that this appears so. The superficial observer fails to detect not only the minor faults, but even the more important errors of individual squadrons in manœuvring, since they can be corrected without considerable change of pace or loss of direction. These faults in which squadrons have been brought up, which have become a habit and second nature with them, and which can only be got rid of with great difficulty and by dint of the greatest energy, show themselves in the manœuvres of the regiment, in the brigade, and larger bodies, propagate themselves, and take such dimensions as to give rise to the gravest disorder. Under this head I need only mention one important evolution, trotting or galloping into an alignment with a wheel on a movable pivot. In this movement the head of the column maintains the most regular pace, while the rear must move with all possible speed. Similarly in the other evolutions. We must insist on these principles and directives being acted upon, and not being allowed to degenerate into lifeless formalities; then only will the squadrons be trained so that they can work when in regiment or greater masses as they do when alone, and without being led away by the other squadrons.

Especially it is necessary to this end that the flank guides (*Flugel-Unteroffiziere*) be thoroughly instructed in these principles, theoretically indoors, and afterwards practically in the field. Of course the officers, the zug-leaders, must be thoroughly acquainted with the principles in every detail, as they will be their instructors, and have to set them an example.

In this way much time, trouble, and horse-flesh will be spared, for rude empiricism leads much more slowly to the desired end than a rational and systematic method. If every one knows exactly what he has to do, he can more easily accomplish it; and this he can be taught in the room. It is useless to proceed in any other manner.

The progress thus aimed at will manifest itself everywhere, for no squadron will violate the fundamental principles (laid down further on) to be observed in wheeling on a movable pivot, movements in line, diminishing the front, forming line from zugs, movements in half-column, and wheeling on a fixed post from the halt or on the move. And this can very easily be

attained if only every squadron leader has made himself thoroughly familiar with these principles through study and teaching his subordinates. No half measures will do; we must be thoroughly grounded in these principles. Safety and strength depend on them.

b. ESSENTIAL PRINCIPLES ON WHICH INSTRUCTIONS IN
MANŒUVRES DEPEND.

In the manœuvring of the squadron one should see a thorough cohesion, a lively, steady, and equal pace in all movements, certain and rapid change of direction, and consequently no crowding or jostling, but strict observance of the principles regulating each evolution; this is the first condition for the manœuvring of a squadron.

Individual riding has its importance, but so has manœuvring; each in its own time and place. After the individual instruction of man and horse, each trooper must be welded into one common whole, the squadron. It is proved by experience that it is incomparably more difficult and requires infinitely more attention, intelligence, experience, and knowledge of the subject, to form good riders and train remounts, than to put together a squadron and instruct it in evolutions, manœuvres, and the regulation movements. The squadron leader who understands this and conforms with the true principles, will be able to remedy the defective training of man or horse, and in the course of a few weeks to have a well-instructed squadron. He will attain this so much the more easily if he follows the true cavalry principles which I shall now point out.

1. *Instruction of the Zug-leaders and Flank-guides in their
Special Duties.*

Before the manœuvring season commences the squadron leader must have thoroughly instructed his zug-leaders and flank-guides theoretically in their duties, afterwards practically in the manœuvres on foot, which are preparatory to the mounted drills. These must be thoroughly efficient, or nothing can be done. The mounted drill performed on foot can, if rightly conducted, greatly facilitate and abridge the mounted work, especially if the movements to be performed mounted on a certain day are practised on foot just previously, on the same day or the day before, so that they are imprinted on the minds of the men. For this it is only necessary that each man should know his place. During the instruction the mounted drill and riding must be kept in mind; the men must be formed up, each in the same place which he would have if mounted. The rear rank will take three paces from the front rank, so as to mark the distance kept when mounted; the ordinary pace corresponding to the walk, the double being the counterpart of the trot and gallop.

From this practice of mounted movements on foot, the flank

guides become familiar with the fundamental evolutions, especially wheeling into column, line, and to the rear, and wheels on a movable pivot.

But these exercises on foot must not be extended further than is necessary to ground the non-commissioned officers and men in the mounted movements and show them their duties; they are only means to the end, and are not to be looked upon as separate drills, such as the regular foot drill.

The flank-guides must be able to explain their duties in each movement as right or left flank-guide; they must know accurately what they have to do in the different cases of wheeling, breaking into zugs, forming line and half-column; and as there is a great difference between knowing a thing and being able to put it in practice, they must be thoroughly exercised in these matters. Everything depends on the zug-leaders and guides; the men are certain to be in their places if the former are sure about their duties. For every movement, therefore, the squadron-leaders must first see what is the essential point on which the success of the whole depends; they will then be able to detect and correct at once the most glaring faults of their non-commissioned officers, and so get their squadrons well in hand; thus they will not divide their attention nor direct it to matters of secondary importance which can be corrected later on, or which will disappear of themselves when the non-commissioned officers are further trained.

This is strikingly apparent in a squadron whose zug-leaders and guides have been thoroughly educated in these principles. Such a squadron works quite differently from one in which that has not been the case; it marches steadily and without the slightest variation of pace in any evolution; it quickly and surely takes any new direction without wavering. From its steadiness and cohesion, which result from the instruction of the leaders and guides, it will come safely out of the most serious difficulty. Any loss of order will be but transitory; it will always take the shortest way, that which leads most quickly to the end in view.

2. Fundamental Principles to be attended to by Zug-leaders and Flank-guides.

a. The zug-leaders must ~~never~~ move off themselves until they have given the corresponding executive word of command, otherwise they induce their zug to move prematurely; as, for instance, in wheeling on a movable point, forming line to the front, &c. In the latter case, the zug-leader, when the movement is executed from the halt, must halt for a moment with his zug, move up to the alignment, and then give the command to dress. Zug-leaders must make a distinction between preparatory cautions and executive words of command, and not give both in one breath; the former must be given quite smoothly,

the latter must be short, well accented, and quick; thus only can steadiness and quiet be maintained in the most rapid movements.

b. It is immaterial if a zug-leader's horse breaks into a gallop, and it would be very narrow-minded to lay much stress on this; but we should insist that his gallop be equal and regular, that he does not alternately increase and decrease his pace, thus checking and causing disorder in his zug. He must keep an equal stride, and thus too he can most easily get his horse to break into the trot again. When men have become accustomed by riding school and individual instruction to judge their pace, to preserve it, and this not by the eye only, leaders will not be ridden over, and their horses will work quietly and steadily in front of the ranks. Whenever the dressing, &c., is taken up by the eye only, the men will never keep their proper distance from their leaders, as they do not keep an equal rhythm.

c. In wheels, whether at the walk, trot, or gallop, the guides on the standing flanks must remain halted as firm as rocks, and not follow their zugs whatever they may do; those on the wheeling flanks must accurately maintain the original pace without increasing or slackening it in the slightest degree. It is they who regulate the pace on the command "*Forward*" after the wheel, who cause the same rate to be preserved when the movement is completed as before it began.

d. The duties of the flank-guides during wheels on a movable pivot (*Hakenschwenken*) are these: the pivot guide must not check when he approaches the wheeling point, but must ride boldly up to it until the zug-leader gives the word to wheel ("*Marsch!*"), even though he comes close upon the zug in front. On this command he slackens the pace, looks straight to the front, and not towards his zug, describes a well-rounded arc of a circle, so as to leave room for the next zug behind, and not oblige it to ease off outwards so as to get room to wheel. Changes of direction on a movable pivot, then, will be executed while still continuing to advance and without the inward flank halting. The outer flank-guide must accurately maintain the original pace and not increase it; he rides so as to make the men feel the pivot flank, not flying off to the outer hand, but rather bearing towards the inner, and keeping his horse about opposite the third file of the preceding zug.

e. The right flank-guide of the squadron cannot be too much practised in riding straight forward (in line); he must on no account deviate to the right, so that the squadron shall not get accustomed to hanging towards the right; he should rather ride somewhat towards the left, so that the men may learn to give way to the left. Similarly the left flank-guide of the first zug, when the squadron is inverted, must be careful to ride straight forward and not give way to the left, so that the men may not be accustomed to hanging to the left when inverted.

f. The flank-guides must be careful that in "right (and left) incline" they do not ride too obliquely towards the flank; if

anything, they should rather ride more to the front than to the side.

g. The flank-guides must be thoroughly grounded in the principles regulating our chief movement, the march direct to the front; they must know that this depends upon these conditions:—

- (1.) Strict uniformity of pace.
- (2.) Maintaining the right direction and riding straight to the front.
- (3.) Riding quietly, boot to boot, but without nervously clinging to one another.
- (4.) Alignment kept not by the eye, whether fixedly towards the dressing hand or with straining of the head in the opposite direction, but by every man looking straight to the front and only occasionally glancing right and left, so as more easily to keep the pace and correct himself, if necessary.

3. *Sizing and Forming up of the Squadron.*

A good correct sizing, &c., is of the highest importance; success depends so much on this that it must be most carefully regulated and adhered to. Every man must ride in his usual place and not be in a different position each day, as some careless serjeant-majors allow, thinking that it does not matter in the least. This the squadron-leader cannot allow. Good, steady non-commissioned officers as flank-guides, who know what they have to do, give cohesion to the zugs; similarly the coverers of the flank-guides, in the rear rank, if intelligent, steady, energetic men, and good riders, preserve order in the rank, keep it well to the outward flank in wheels into column and line, and to the rear, so as to leave room for the next zug. Such men must be mounted on good horses, the best in appearance and free. The men must be sized as carefully as possible, for it is by no means a matter of indifference, apart from the bad look of the thing, whether a tall man is next to a short one. Blank files may only be on the left flank, never the right of the rear rank.

4. *Number of Files.*

For manœuvring, there should be as many files as possible, let it be 12 files per zug. All that is not present on the *champ de bataille* does not fight and can be left out of consideration; a large establishment on paper and weak troops are a contradiction; they betoken undrilled men and untrained horses, and point to troops which are in bad order and inefficient, a reproach that none of us would incur.

5. *Condition of the Horses.*

The horses must be maintained in as good condition as they were before the drills began. Even if the squadrons go through
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their movements and evolution with the greatest rapidity, precision, and steadiness, still, if the horses are out of condition and poor, the performance cannot be considered meritorious, but the state of the horses would rather call for the severest censure; if the squadrons wish to have the fullest satisfaction, they must use every endeavour to keep up the condition of the horses, without, however, on that account avoiding any exertion and duties that are incumbent on them.

6. *Formation of the Squadron.*

Alignment depends entirely on this, that the horses are square to the front, that light touch is maintained between neighbouring files, that the front rank maintains two full paces distance from the zug-leader, the rear rank one pace from the front rank, and the serrefile (*Schliessenden*) non-commissioned officers one pace from the rear rank. Thus placed, the four lines of zug-leaders, front and rear rank, and serrefiles will be parallel. It must be the first and fundamental principle with our arm to take the alignment at first, when in line, directly from the front, and never from the right or left, *i.e.*, to take a distance of two paces from the zug-leaders, who first align themselves and then remain perfectly steady; this is necessary because, firstly, the alignment of the front rank will thus always be parallel to that of the zug-leaders, which is never the case by dressing by the eyes to the right or left, and secondly, on account of a fundamental cavalry principle, of a moral nature; everything depends on the zug-leader, and the men must be educated and habituated to follow him blindly, wherever he may lead them. The alignment of the front rank, then, depends entirely on that of the zug-leaders; the alignment of the latter must first be taken up promptly, and then the front rank comes at two paces distance; eyes must be directed to the front as usual; the centre men of zugs, and the wings with them, take up two paces distance from the zug-leaders; only when this has been done, which of itself is most important, will the more minute dressing, that is, the accurate alignment of each individual man, who may not be perfectly aligned, be effected, and this will be done by a glance towards the dressing flank; but the general dressing must by no means be changed in consequence. The zug-leader must never dress by the squadron, the very opposite should be the case. Next comes the rear rank, which similarly must not dress by the eye towards the directing flank, but by keeping a full pace from the front rank, and taking the alignment from the front; if this is done, the eyes may take a glance towards the dressing flank so as to get a finer alignment.

The serrefiles proceed in a similar manner. In this way, quickly and without trouble, will the different ranks become parallel to each other and stand at their proper distances, which formerly was never the case.

It very often happens that the horses do not stand square to

the front, but are inclined to the left, and the men are unable to correct this bad habit, which has become a second nature to them. In such a case the alignment can never be perfect, and it will take endless time to remedy it. Slow dressing is a veritable canker in cavalry drill, and cannot be too strictly prohibited; it depends on a very faulty principle. Every squadron-leader must therefore before he dresses see from the front that the horses are properly placed and the correct distance taken from the zug-leaders, both of which conditions are essential.

A further defect in the formation of the squadron is the instinctive reining-back of the horses, a proof that they are ridden but little by the leg and principally by the hands. As a remedy against that, I recommend that immediately after halting, the command "*Sit at ease—Give them their heads—Make much of your horses!*" should be given.

At an inspection parade every man should wait for the inspecting officer with his eyes, as he rides along the front, and look frankly at him with the head erect, his horse being kept perfectly steady and square to the front, and neither allowed to rein back nor to go to sleep, as one so often sees; on the contrary, the rider must press him up, and should follow the inspecting officer by a slight turn of the head as he rides across the front. This is the least that should be expected from the men; it is a sign of inattention and indifference when, on such occasions, this is not done, and the men look straight before them. The mode of carrying the swords must be strictly observed; the blade must be perfectly upright, the right hand on the thigh, a hand's breadth in front of the hip. Lancers should not hang towards their lances, and should carry them perpendicularly. The lance is a means of ensuring a good seat. [The remainder of this paragraph refers to a mode of taking order for inspection.]

7. *Preservation of the Independence of Individual Men in the Ranks.*

In manœuvring we cannot too strongly insist that every man shall preserve his independence in the ranks, that he is not simply carried by his horse, but himself controls him; this is especially necessary for the rear rank, which generally consists of the laziest, most stupid, and careless men, who allow themselves to be shoved right and left with perfect indifference, instead of riding their horses. There are many expedients for making the men ride individually in the ranks; a very good one, and one that has proved effectual, is to make the horses change feet from right to left and *vice versa*, while at the gallop, as in the riding school, and to insist upon each horse galloping true.

8. *The Rear Rank.*

The squadron serjeant-major must look after the rear rank, and should be most particular that the distance of a full pace is kept from the front rank, that they do not ride on the

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heels of the front rank, that they do not, so to speak, lean upon it, but ride independently and sit straight. At the gallop the rear rank takes two paces' distance; lancers requiring three paces when at the "engage." The serjeant-major of the squadron is responsible for this, and must therefore ride about in rear and keep a sharp eye on careless men, keeping them up to the mark, and if necessary bringing them to the notice of the squadron-leader. The clinging of the rear to the front rank is a grave fault; it shows inefficiency in the leader, makes a true and steady evolution impossible, especially the most important of all, a direct march to the front, and has as a consequence that horses become unfit for service through being trodden on, which should never be the case.

In order to accustom the rear rank to ride independently and keep their proper distance, it is very advantageous to make them ride, as a drill, at one or two horses' lengths from the front rank, and march to the front in this formation.

The serjeant-major then moves about in front of the rear rank and keeps it in order. Lancers should practise this with lances at the "carry" and "engage."

It is also indispensably necessary that the squadron-leader, from the very commencement of the instruction, should carefully watch the rear rank on the wheeling flank during wheels by zugs, especially in the wheel about; in this each rear rank man must incline so as to direct his horse's head on the man next but one from his own front rank man, and not cover by merely passaging and crowding. Unless this be done, an orderly manœuvre cannot be effected, since the rear rank would prevent the front rank from coming into line, owing to the rear rank horses being in an oblique position. The men of the rear rank should never be forced backwards out of the rank in wheels, as this merely results from gross carelessness on the part of the men in question, who are not riding independently, but allow themselves to be pushed about by their neighbours. Those who suffer themselves to be squeezed out of the ranks should be punished.

9. Regulation Paces to be adhered to.

Taking short quick steps and jogging while at the walk must be abolished; it is an irregularity that proves bad riding. Irregular pace is the worst fault in riding, and ruins both man and horse. No rider ought to be loose in his seat at the walk.

10. Alignment to be regulated by Pace, and not by Eye merely.

Before all things the preservation of a regular rate of movement at each of the paces is an absolute necessity; there must only be one rate of movement for each pace, without any variation whatever, whether in line, column of manœuvre, or column of route. The more a squadron changes the rate of pace, the worse it rides. All alignment by the eye only must be absolutely

done away with; dressing must be kept solely by the preservation of an invariable rate of movement in each pace and by light "feel" or "touch," on no account by glancing to either side. Where the alignment is kept by observing the proper pace and by touch, where a steady, equal rate is maintained, there one sees a good line; where this is not the case and the men align themselves by eye only, there one sees merely isolated riders and the men alternately checking and over-shooting the alignment, which ruins the horses. The eyes must as much as possible be directed forward, and it is only as an aid for preserving the pace that the men may occasionally glance right and left, but never to one flank only. The command "*Eyes-right* (or *Left*") merely indicates that the touch is to be taken from the named hand. The alignment of the front rank must be kept by preserving two paces distance from the zug-leaders, that of the rear rank by keeping a full pace from the front rank, thus always from the front and never from a flank.

11. *Direction.*

When there are no objective points on which to lead or on which to direct one's attack, before an enemy or in field movements, it is absolutely necessary that the squadron and zug-leaders, the flank-guides, and the men themselves, should have a thorough knowledge of the bearings of the ground on which they have to manoeuvre; they should know its dimensions, its greatest length and breadth, its angles, and the sides parallel to which they have to ride; they should know exactly the four main lines of the ground, which are generally parallel or at right angles with the furrows, and the diagonal lines and directions resulting from them; after that, suitable distant objects lying in these eight directions, but outside the ground, must be taken, such as steeples, windmills, villages, houses, heights, &c., on which the whole front will invariably ride as objectives. Squadron and zug-leaders must place their horses in these directions and point towards them with their swords, especially when a new direction is taken, so as to recover and steady the men if there is any hesitation or wavering; all pushing and unsteadiness in the ranks will then cease of itself. In this way only is it possible to manoeuvre with certainty and steadiness, and to perform exact and precise movements, and thus only can the troops be trained to take up new directions rapidly and maintain them, and experience has shown that so much depends on this.

Oblique fronts on the diagonal are especially to be taken up during the drills; squadrons should pass from one diagonal direction to another. Oblique fronts should not be the exception, but the rule, since troops are much better instructed on them than on perpendicular fronts; if they work well in these directions, especially in changing from one oblique direction to another, then there is no difficulty in working straight to the front. It is therefore to the interest of the squadron to work more on

oblique than on straight lines, apart from the fact that it gives it greater mobility and manœuvring power. Oblique directions represent *the shortest roads*, perpendicular lines and right angles mean *détours*.

12. *Correction of Mistakes.*

All faults must be corrected very gradually and not all at once, especially crowding towards the directing flank when the proper touch has been lost; this cannot be too particularly avoided. In the correction of this fault the pace must not be varied. That squadron rides the worst in which very frequent changes in the pace are produced by the attempts made to correct their faults, whereby the faults themselves are aggravated.

13. *Inversion.*

Inversion of the zugs must not be the exception, but the rule, and troops must be thoroughly habituated to it. The unlimited and extended employment of inversion is indispensable for the attainment of mobility and manœuvring power. So much use must be made of it, that the very name and idea hitherto attached to the word ought to disappear entirely. Leaders and men ought to feel perfectly at home in this formation. The attack and marching past must be practised as frequently in inverted order as in the normal formation.

14. *Gradation of Instruction.*

The tactical instruction of the squadron, on which so much depends, must proceed in a logical, systematic order, and not so merely because we thus lay a firm foundation and can build up something solid and complete; but it is only in this way that the true cavalry spirit can be developed and stimulated, the springs of which are freshness, life, mobility, and rapidity.

For example, how can the cavalry spirit animate a squadron whose leader, at the very beginning of the tactical instruction, crawls about by wheels by threes at the halt, &c., instead of making it from the first supple and mobile by moving it to the right and left, front and rear, and by changing front; also giving it life and mobility by wheels into column and line, wheels on a movable pivot, and to the rear, followed by advances.

The squadron leader must ride on long lines, perform extended movements, and not allow the different evolutions to follow each other too quickly; that is the characteristic of cavalry movements.

During the first days of drill the chief task of the squadron leader, when he has taught his squadron to form in ranks and zugs, should be to practise the following movements, so as to make his squadron supple and mobile in all directions: wheeling by zugs to a flank at the trot, marching straight forward, keeping up the trot for a considerable time, changing direction on a

movable pivot (*hakenschwenken*), continuing to trot, wheeling into line, moving straight to the front in line at the trot for some time, then walking so as to breathe the horses, afterwards wheeling into column to the other flank, trotting, changing direction on a movable pivot, still trotting, wheeling into line, trotting forward and then walking; these are two exercises at the trot to habituate the men to keeping an alignment. Similarly the next two exercises in alignment will be at the trot, with the wheel into line outwards.* After that comes wheeling to the right by zugs, changing direction to the right on a movable pivot, left wheel into line; wheeling to the left by zugs, change direction to the left, right wheel into line. The most rational thing to begin with is to get the men thus habituated to wheeling into column, changing direction, and wheeling into line to all fronts, immediately followed by long forward marches without halting; next wheels to the rear from either flank, immediately followed by movements at the trot in line, normal or inverted. If this be steadily done much has been already attained; the squadron has in some measure acquired cohesion, and this can be arrived at in very few days' drill if the non-commissioned officers have had proper theoretical instruction, and when the men have had some preliminary school-exercises in mounted work; but there must be no twisting about at the halt, no diminishing the front to threes, &c.; no anxiety about marches in line, about which there have been previous lengthy verbal instructions, perhaps at the halt; this spoils everything. The march in line must appear to the men as simple, easy, and comfortable as the march in column of zugs, by threes, or single file. This is best attained by making no ado about it, by not making the men believe that there ever is any difficulty in it, by conforming to the practical principles above mentioned, by wheeling into line after taking ground to a flank by zugs at the trot and continuing to advance *at the same pace*, wheeling at once into column to a flank again as soon as the line appears to be getting unsteady. There must be no dropping to the walk after the wheel into line of a column at the trot or gallop, but an advance must be made at the same pace, afterwards coming to the walk. These evolutions are of the first importance, the fundamental principles of which cannot therefore be too strongly inculcated on the squadron. The wheel of zugs on a fixed or movable pivot must first of all be thoroughly learnt, and the guides must be so well versed in their duties during these movements as not to violate the fundamental principles regulating them; for it is not easy afterwards to remedy carelessness and negligence in this respect; the thing will have become a habit, and like all habits it will be more difficult to get out of it than it is to learn what is right. In this way the zugs too acquire habits that result in the gravest faults; for example, when the pivot flank guide in wheels on a fixed pivot does not stand per-

* Corresponding to our wheel into line to the outer flank.—Tr.

fectly fast but describes an arc, instead of feeling towards the pivot, they feel towards the wheeling flank. On these evolutions will depend whether the squadron-leader has his squadron thoroughly in hand on all occasions, which is of primary importance, whether it wavers about without cohesion, or is able at his command or signal to carry out any movement with exactitude and precision.

Again, on the correct and steady performance of changes of direction on a movable pivot depends preservation of pace, the basis of steadiness in all movements in column, and on which the quiet and order of the troop depend.

After these exercises, the next thing to practise would be diminishing the front to zugs and forming line to the front from column of zugs. After this the wheel of zugs half right and half left, confirmation in keeping the alignment from the front, breaking into half-column which cannot be done too well, and in which, as usual, the flank-guides have the most important duty to perform. Farther on come movements to the front by the incline and wheels of the squadron in line.

Then will come the squadron school drill, wheeling on a movable pivot in the square, wheeling threes right and changing direction to the left, and *vice versa*, diminishing the front from zugs to threes and again increasing to zugs, and last of all, the formation of zug column to the front at the halt. This would be about the rational course of instruction, leading up to and concluding with the attack.

The attack is the quintessence, the crown, the touch-stone of the whole instruction.

15. *Instruction in the Attack.*

The exercises requisite to bring horses into working condition must be very gradually carried out, so that they may be in good wind and be capable of keeping up a rapid pace for a considerable time. Steady, gradual practice in protracted gallops in line for considerable distances, with wheels of the line, is absolutely necessary, and this had better be done at first by each rank separately, so as to ensure independence in the rear rank. Both riders and horses must be habituated to this long, equal, and calm stride; it must become a second nature to them, and the leader must acquire the conviction that his squadron will never break into the charge without his command and get out of his control; this is a most necessary condition. When the stride at the gallop is easy, equal, and even with the ground, then the front will always be compact, which is of the greatest importance. No horse in front should be restless, change legs or spring high, for such horses cause disorder in the rank, make other horses restive, and cannot themselves hold out, because they waste their forces and lose their wind. The gallop in zugs is generally good, that in line defective; this is owing principally to the direction not being adhered to; they waver right and left from it, and the men are not used to movements in this

formation. The gallop in line must therefore become familiar to them, as it is a necessary formation; line should be formed by wheeling into line from column of zugs at the gallop, which is the best means of securing quietness and steadiness. The shock* on the command "*Charge*" ["*Marsch—Marsch!*"] is only the result of this gallop, and will always be compact and rapid, in two ranks and not in ten, if the gallop is quiet, free, and steady. Of course the execution of this gallop will depend principally on the rational training, position, and collecting of the horse during the winter months: and the men must then have learnt to sit steadily and firmly in the saddle, and to breathe quietly, so as not to irritate their horses and disorder their stride. It is incontestable, that owing to the grazing fire of the breech-loader, long movements in line at the gallop have become a necessity, if we would still retain our efficiency on the field of battle.

16. *Cohesion of the Parts of the Squadron.*

When not in line, each zug or other body must move compactly as a complete unit. Each zug-leader in his zug, each non-commissioned officer in his sub-division, each one in his sphere, must as quickly as possible correct any disorder without waiting for the intervention of a superior. No error ought to be allowed to propagate itself and take larger dimensions, but must be corrected in good time by following or neighbouring bodies as soon as they perceive it; the officers must be instructed to do this, and too much attention cannot be paid to it. The squadron-leader must always manœuvre his squadron as if he were working in the regiment with other bodies, where every fault propagates itself and makes its effects felt in other bodies.

17. *Relation of the Zugs to their own Leader.*

The squadron-leader must continually observe that the zugs keep their two paces distance from their leaders and obey their commands strictly and to the letter, without attempting to improve upon them. It is far better that the zug-leader should make a mistake and his zug obey his order and follow him, than that the zug should not obey him, but attempt to correct his mistake. This is a most important thing, both as regards the manœuvring itself, and as a matter of morale.

18. *Mode of giving Commands.*

The mode of giving a word of command is of vast importance, and has a great influence on the manner in which it will be executed. The executive part of a command must be clearly distinguished from the cautionary portion, and must not

* By the shock is understood that period of the charge when the shock is supposed to ensue.

follow it too quickly; the latter should be given quietly, so as to impart quiet to the troop; the former with vigour and decision, and well accented, so as to secure prompt execution. From the very tone and manner of giving the command, should the troop gather how the movement is to be performed. There is nothing that the leader should be more on his guard against than the use of certain ever-recurring words during his instruction, or when calling out to men; they are sick of hearing them, and are so used to them that they have no effect on them, and are consequently useless. If the necessary quiet when moving at the fastest pace could be obtained, for instance, by the caution "*Steady*," it would be very easy to adopt this means; but other factors are necessary in order to arrive at this urgently necessary result.

19. *Execution of Trumpet Sounds.*

From the very commencement great attention must be paid to the exact and prompt compliance with these signals, without any jostling of the horses. Trumpet sounds must not be blurred out, but given quietly and clearly. These must be immediately conformed to by all ranks as soon as they are clearly recognised, even from the second or third note, whether the men are in line, column of zugs, in threes or half-sections, and thus each man can assist in assuming the pace indicated. Squadrons should act upon the sounds at once, and not wait for the end of them, as that would make the movements trailing and sluggish, whereas they should be distinguished by life, decision, and rapidity. The extreme bodies or rear zugs, for instance, should always at once move and push to the front, not allow themselves to be dragged on and wait till they have moved in front. Trumpets, therefore, should always be blown in the direction of the rear of a column and not towards the head of it, and the squadron-leader must glance at the rear to see that it is working properly. If this principle be attended to the pace will be kept everywhere, from the head of the column to the rear, and the latter will not have to hurry up. In threes, half-sections, threes right or left, in squadron drill, breaking into threes and half-sections, the rear body must not ride an atom faster than the head of the column, even when they have changed direction several times consecutively on a movable pivot. Every part should be kept well together *by pace*, no hurrying up, no checking or over-shooting the mark. But this is possible only when each horseman is accustomed (1) to obey the trumpet signal quickly and not sleepily; (2) not to crowd outwards during wheels on a movable pivot, but gradually round off the arc to be described by the pivot as laid down; (3) to *feel* the pace and not vary it. This must be observed in the trot as well as at the gallop. Nothing is worse for maintaining the pace than when on a trumpet sound being given a rear body [as in half-sections] or a rear zug waits until the leading bodies or

zugs have moved. On the command "*Halt*," every one must stand fast; whether the files are well closed together or dressed has nothing to do with it; only every one must stand perfectly still until the command "*Eyes Right—Dress*," which ought not to be given immediately, so as to make the men steady first. This working by trumpet sound is better practised in the square by ranks, where each man is better seen and it is easier to watch how he moves.

20. *Accustoming the Men to Commands coming from the Rear.*

After the squadron-leader has trained his men with the front towards him, he must accustom them to work when it has been wheeled to the rear by zugs so that he is in rear of them, which makes it far more difficult to understand and obey his order. When the zugs are inverted and the squadron-leader thus brought in rear of them, he must wheel them into column and back again into line, and practise wheels of the squadron and direct marches, so that the men may become accustomed to commands coming from the rear.

21. *Place of the Squadron-Leader in Movements in Line.*

When the squadron is in line, the leader should remain in advance to see that they ride straight forward, or on a flank so as to observe the pace better.*

22. *Attention of the Squadron-Leader to the Critical Points.*

Every evolution has its critical point on which its exactness essentially depends; to this and this only must the squadron-leader direct his entire attention in each movement, as has already been mentioned; the rest will come right of itself. These points depend principally upon the conduct of the flank-guides and zug-leaders; for instance, during the wheel of the entire squadron at the trot, the squadron-leader must first observe the guide at the pivot flank, whether he is describing his arc at a free walk, looking before him and not inwards towards the rank; next he must observe the guide on the wheeling flank, noticing whether he maintains a smooth trot without increasing the pace. Again in changing direction on a movable pivot at the trot, the squadron-leader must principally notice the pivot flank-guide of the leading zug, whether he describes his arc in a forward direction at a reduced rate of trot, looking before him and not at his rank, so as to leave the wheeling point free for the next zug so that there may be no checking in the column but, on the contrary, an equal pace may be maintained. After

* The instructions on this head refer to the mode of alignment by a flank which was in vogue before the regulations directed that it should be taken from the centre.

this the leader will watch that no zug inclines outwards to the right or left, as often happens, but that all stick to the wheeling point, and the outward flank guides keep their proper position by directing their horse on the third file from the wheeling flank of the preceding zug.

23. *Auxiliary Aids for Correcting Mistakes without Talking or Shouting.*

From the very beginning great care must be taken that there is no talking or shouting to correct mistakes, for when once this habit is acquired it is very difficult to eradicate it. Speaking and correcting are of no use at all, and are really detrimental to work; they draw the attention from the word of command and make a very bad impression. Only the word of command must be heard. Zug-leaders and guides assist best by the manner of their individual riding, by preserving the correct pace and direction, and by pointing with the sword over their horses' heads, especially when a new direction has to be taken, and rapidly. Such silent preconcerted signals, to which the troop must be thoroughly accustomed, are of far more use than talking, correcting, instructing, and shouting; if the zug-leaders look round and correct mistakes they lose the direction, give a false one to the zug, and generally vary the pace.

24. *Evolutions without any Word of Command or Trumpet Sound.*

I most earnestly recommend the practice of evolutions without words of command or trumpet sounds, riding towards the objective, both in line and zug column, in accordance with the wave of the squadron-leader's sword and the direction of his horse. This is a capital exercise for developing attentiveness of the men, and one that materially contributes to steadiness and sureness of direction. The simpler and easier the indications for the various movements, and the more quietly they are given, so much the better is it. Our numerous sounds and their concomitant words of command only complicate the movements and make us unwieldy; they must therefore be reduced to a minimum.

25. *Practice in Rank Entire.*

During the more advanced part of the course of instruction, I recommend frequent drill of the squadron in single rank. This tends to give more independence to the rear rank, develops attentiveness and intelligence, and is moreover a highly necessary thing to practise, since, as has frequently occurred, it is often required on actual service.

The formation in single rank, which produces eight zugs from four, should be done quietly and orderly without any noise or excitement. The front rank advances at the trot and halts; the rear rank then takes ground to the right or left by zugs at

the trot, wheels into line, and halts; the rear rank dressing up to the alignment. The zug-leaders, flank-guides, and serrefile non-commissioned officers distribute themselves equally throughout the zugs according to previous orders.

All the movements required for evolutions in two ranks should be steadily and correctly performed in single rank.

26. *Certain Tactical Principles.*

1. At every drill, on entering the ground, deployment as for the passage of a defile will be practised, forming column of zugs from column of route (threes), and line from column of zugs; this cannot be done too rapidly.

2. Except when the ground requires it, the line should as seldom as possible take ground to the right or left by threes; all movements, before the enemy and in manœuvres, should as far as possible be done by compact zugs.

3. The men must be accustomed to the word "*Right-Front*" or "*Left-Front*," when marching in column of route (threes); on this command each body (of threes) will wheel to the named flank as if the command had been "*Threes-right*" or "*Threes-left*." On thus wheeling into line each section closes to the centre. The squadron-leader should give the signal "*Trot*" for this formation. It is immaterial whether this formation brings the squadron into inverted order or the normal position. It is of the greatest importance that after thus forming front to either flank, the direction indicated by the squadron-leader's sword and horse should be quickly taken up.

These would be about the main principles on which the squadron-leader should proceed in drilling his squadron. If he follows these, if he knows the critical points in each evolution, and attends to them, he will give his squadron steadiness and cohesion; everything will not then depend on accidental circumstances, which may have an injurious effect, and he will always obtain a satisfactory result; whereas by vague, spiritless drill, he will only arrive at dead routine, with no cohesion, and all will break down at the least unfavourable occurrence, since it is built on no solid foundation. Instead of cutting a good figure or coming to grief at official inspections, we should think more of steadiness and precision of movements.

c. PRINCIPLES AND DIRECTIONS FOR THE MOVEMENTS PRESCRIBED BY THE REGULATIONS, WHICH RELATE TO THE MORE IMPORTANT EVOLUTIONS.

As I have convinced myself that in movements and evolutions little attention is paid to fundamental rules and principles, on which alone the steady, precise, and calm performance of them depends, and that the true principles of drill have fallen into oblivion, and as I wish to revive them, so as to facilitate the work of each soldier, to spare the troop much trouble, and effort,

and to obtain a satisfactory result, I append some extracts from the instructions and directions for the regulation movements, with the view of these principles being applied in practice.

They refer chiefly to changing direction on a movable pivot, marches in line, breaking into zugs, and forming line from zug column. I would particularly insist that squadron-leaders should base the instruction of their squadrons on these extracts, so that a fixed principle, more system, and therefore more precision and steadiness, may be arrived at in this necessary division of the instruction, the mounted squadron drill, and as little room as possible left to chance.

The Regulations can only lay down bare, dry rules, and therefore so much the more necessary are such instructions as develop and work out, in the true cavalry spirit, the dry formulæ given in the regulations. If they are merely traditional, they will soon fall into oblivion; we shall therefore best attain our object by presenting them as instructions, so that they may be kept in mind.

1. *General Considerations.*

There exist certain well-defined principles for the performance of movements and evolutions, which must be rigorously observed; every leader must thoroughly know on what the exact performance of each evolution depends. We should aim, not at giving the troop a mechanical routine by means of mere habit and everlasting repetition, but at instilling into them in a rational and systematic manner the principles governing the various movements and evolutions in the Regulations; the cadres, the zug-leaders and flank-guides, must be thoroughly grounded, theoretically and practically, which alone can insure steadiness and precision; the rest will then come of itself.

The real, true art of drill depends on well-defined principles and laws; and this art is so indispensable, because by it alone can movements be preserved from the influence of chance, from the propagation of little faults which in time would affect the whole, and in place of all this certainty and precision be attained. Instead of the theory of breaking the men's hearts, we must have those principles which ensure order, steadiness, and precision. These laws then must be well ascertained, taught, and followed. At the head of them we must place the fundamental principles of all movements, *Pace* and *Direction*; these must be the essence of our whole Regulations and permeate them everywhere.

The dry formulæ of the Regulations must be rightly interpreted in the true cavalry sense, must be animated with the true cavalry spirit. If this be done, we can get much good out of every regulation, even out of the most faulty; it is indeed a sort of clothing which we must all be accustomed to wear, and in which we must feel at home. When the cavalry spirit has permeated the dry form, then will the latter effect its real end, and not exercise an injurious influence on our arm.

We need not censure mistakes made during manœuvres, for these cannot be avoided; but what is to be blamed is, that the true and real principles of drill should be violated, as is always the case when the mistakes are not confined to individuals, but extend to the whole, and naturally take increased dimensions. In such a case all our work will depend upon chance, and there will be no certainty about the movements. These fundamental principles must be unremittingly and strictly adhered to, without any deviation or concession.

Each evolution has its characteristic point, on which its execution mainly depends; by observing it the movement will never miscarry, and disorder cannot arise; the worst that can happen is that it may not be carried out neatly and elegantly. These points must be recognised and must never be offended against. At first the eye must be principally kept upon those points only which concern the zug-leaders and flank-guides, these must first be thoroughly habituated to their duties, and have them ingrained in their flesh and blood; only when this has been done must the secondary considerations be attended to, which concern each particular evolution, for an offence against these does far less harm, and extends to a shorter distance than an infraction of one of the fundamental principles.

Each evolution then has its characteristic fault, which always repeats itself in a peculiar manner if it is not decidedly checked at the very first. These characteristic faults and their underlying causes must be clearly explained to the zug-leaders and flank-guides, so that they may be able to avoid them; the corresponding remedy must be pointed out to them, so that these faults may be anticipated and not allowed to become, as it were, naturalised. It is far more difficult to eradicate bad habits, than to acquire that which is good and right.

By observing these principles and the directions for performing the regulation movements, and by following a logical and systematic method, anticipating the faults that are sure to occur, we shall with less expenditure of time and energy, and much sooner, arrive at the desired end, and this with certainty and without dependence on chance and constantly varying influences.

2. *Particular Considerations.*

a. *Wheeling by Zugs, either into Column, Line, or About.*

aa. *Essential Condition.*

The inner flank-guides must stand fast like walls, halt, turn on the centre and not pay any attention to their zugs. The flank-guides on the wheeling flank must strictly maintain the previous pace, neither increasing nor slackening it; it is they who, on the command "*Forward*" when the wheel is completed, regulate the pace and cause the same rate to be kept after as before the wheel.

The wheeling flanks must always get the sound or command

"Trot" or "Gallop" in good time; they should never have to check or halt after the wheel, as that is contrary to the cavalry spirit and destroys the smooth flow of the movement; the horses too are beyond measure fatigued and injured by being frequently pulled up suddenly. After every wheel into line they should advance, even for ever so short a distance, at the trot or gallop, to mark the movement of attack after the formation of line; this gives more vigour, life, and neatness to the drill. It is only as a drill or to confirm the men that it is permissible to wheel into column once occasionally without the flank trotting, so as to test whether the men in wheeling a right angle halt of themselves and do not overwheel.

Great care must be taken that the rear rank does not close up, but that each man inclines right or left so as to direct his horse upon the second man from his front rank man, so that there may be no crowding, the next zug may keep its proper place, and no man be pushed out of the rank.

In wheels into column at the halt, the wheeling flank-guide must first ride straight forward, so as first to get into the proper pace, and when this is obtained he can wheel. If this is not done, the pace will be dull and the movement will not look well.

In wheeling into line, when the distances have been lost, the pivot flank-guides must never remedy them by shifting. At all paces their business is to halt and turn their horses on the centres, and the zugs must preserve the intervals between files from them. It is much better to have a small gap in the line, which can be corrected during the subsequent advance, than to violate the fundamental principles of drill.

The zug-leaders have not to describe the same arc as their zugs, or they will lose their place; they should turn sharp to the hand named, and pass along the front of their zugs.

After a right-about wheel to retire or advance, the men must be strictly enjoined not to continue the position of left-incline which they had during the wheel-about, but as soon as it is completed they must use the right leg strongly, so as not to press towards the left or wheeling flank, which otherwise is sure to happen. All must at once place their horses square to the front; but they had better take the new direction from the pivot, rather than from the wheeling flank. It is of the greatest importance that the new front, the new direction should be taken up as soon as possible by each man.

bb. Characteristic Faults.

1. The guides on the pivot flanks describe large arcs in wheeling into column, line, or about.
2. The guides on the wheeling flanks change the pace.
3. The command [*"Forward"*] comes too late, and the men overwheel.
4. The rear rank close up or ride through the front rank.
5. In wheeling into column from the halt, the wheeling

flank-guide immediately begins to wheel, instead of first advancing.

6. The pivot flank-guides, in wheeling into line, try to make up for distance that has been lost.

7. The zug-leaders describe an arc instead of simply turning.

8. The men do not use the proper (inward) leg after a wheel about; this fault must be combated with great energy, because the rapid taking up of the new direction depends on the proper and powerful use of the inward leg.

b. Change of Direction of Columns on a Movable Pivot.

aa. *Essential Condition.*

Everything depends upon the pivot flank-guide of the leading zug; on account of the great depth of each zug, and in order to leave the wheeling point free as soon as possible for the next zug behind, he must continue to advance while describing an arc. When the change of direction is made at the trot, the pivot flank-guide must not drop to the walk, but trot short; he must not look towards his zug, but should look before him at the arc he has to describe, so as to make it in accordance with the rules laid down. Looking at the zug, which is always observed in inexperienced non-commissioned officers, is of no use whatever, but rather it will cause him to ride the same as those he looks at, which must not be, and is indeed the very gravest fault.

The outward flank-guide maintains the original pace, and must not hurry it; he feels towards the inward flank, towards the wheeling point, and keeps the zug towards it; this tends to good wheeling, both as regards direction and the entire evolution.

The zug-leader must watch the outward flank, so as to give the command "*Forward*" at the right time, *i.e.*, the moment before the flank has completed the wheel, whereupon the inward flank-guide resumes the original pace; a zug must never be allowed to over-wheel.

The leader of a rear zug of a squadron should give the caution "*Wheel*" directly the leader of the next in advance gives the command "*March*,"* but he must continue to march straight forward at the same rate of pace, so as not to induce his zug to wheel prematurely; he must be most careful that the inward flank strictly maintains the pace without the slightest check, until he gives the executive command "*March*." This command must be given when the inward flank-guide is five or six paces from the wheeling point, and on receiving it he must trot short (*i.e.*, move at a slower rate of the same pace at which he was moving), and thus during the wheel he will approach close to the zug in front; looking before him and not at his zug, he

* In wheeling on the move, "*Wheel*" is given as a caution, and the change of direction is not commenced until the executive word "*March*" is given.—Tr.

(I. C.)

E

describes his arc in a forward direction, until the command "*Forward*" is given. On this command, if he has described a correct arc and has been closely following the preceding zug during the greater part of the wheel, he will find that he has the correct distance for wheeling into line.

The outward flank-guide feels during the wheel towards the inward flank, and by properly rounding the arc he describes, keeps the zug together. In order to preserve the original pace, he must take as a guide the 3rd or 4th file from the outward flank of the preceding zug. He must not attempt to cover the outer flank-guide of the preceding zug, as is often done, for then he will describe too large an arc; he will lose ground, that is, distance, and consequently will vary the pace, which does most harm. The remaining zugs follow in the same manner.

When a column changes direction according to these principles, the rear zugs will experience no check before arriving at the wheeling-point, and will not have to fly outwards, which is the most dangerous fault in this evolution; for *in wheeling the arc must be described in accordance with the inward flank, so as to take the shortest route and to keep an even pace throughout the column*; this pace must neither be slackened just before the wheel, nor increased after it, things that result from one and the same cause.

The criterion of good wheeling in column is, that when 20 or 40, or more zugs wheel one after another on a movable pivot, the pace of the head and rear of the column, and the proper distances for wheeling into line are maintained; by following the true principle and system, this can easily be attained.

Next, it is of great importance that, after completing the change of direction (which should be practised to the extent of both a right angle and half a right angle), the leading zug should march straight. A fault in this respect always makes itself felt, as in all cavalry movements, in the next or following evolution, and, owing to collisions, not seldom costs limb or life of man or horse.

We recapitulate the fundamental principles for this important and constantly occurring evolution.

1. The zugs must not wheel before the zug-leader's word "*March*." The caution "*Wheel*," and the command "*March*" must be well separated, so as to ensure calm, certainty, and steadiness.

2. The zug-leader must not mislead his zug into wheeling before the proper time, by himself beginning to wheel before he has given the command "*March*."

3. The zug-leader must give the command "*March*" (to wheel) when the zug is five or six paces from the wheeling-point, so that the pivot flank-guide may be able to describe the proper arc. In order to prevent over-wheeling, the command "*Forward*" must not be given too late; it should be given the moment before the wheel is completed.

4. The pivot flank-guide must by riding freely forward, describe an arc so large, that the wheeling-point may be left quite free for the following zug; if at the trot, he will trot short. The next zug should not be forced outwards, owing to want of room, as commonly happens, in consequence of which in changing direction to the left, all the horses usually incline to the right, and *vice versa*. The arc must be described, in changing direction to the left, by the pivot flank-guide wheeling to the left, his horse placed to the left, and the left leg well on; similarly to the right. The next zug must with its pivot flank come close up to the preceding zug; and if the wheel has been properly made, both covering and distance will be correct when the word "*Forward*" is given, on which signal the original pace is resumed.

5. During the wheel the outward flank-guide must rigidly preserve the original pace, a fundamental principle in all wheels, keep the zug closed to the pivot flank, and direct his horse on the third or fourth file from the outward flank of the preceding zug, so as to describe an arc as small as possible.

6. The pivot flank-guide must look to the front during the wheel, and not towards his zug; the latter would cause him to neglect his particular duty, and make him fly outwards, which is precisely the worst fault he could commit, and must be carefully avoided. Neither must he try too soon to cover the inward flank-guide of the preceding zug; the wheel must first have been completed, and "*Forward*" given.

Let us not deceive ourselves about this; it is of the greatest consequence to practise this movement after the method pointed out, because it alone will counteract the bad habits that we have contracted. It is only by thorough and systematic practice, and persevering in the principles laid down, by alternately placing ourselves near the pivot and on the wheeling flank, that we shall succeed in obtaining steadiness and certainty in the flank-guides, on which all depends. Next, it is not sufficient to practise merely changing direction to the right and left on a movable pivot, but squadrons must be exercised in the four ways of trotting into an alignment, so as to instruct and confirm the flank-guides in these movements; thus, a column of zugs that has advanced from the right must wheel its head to the left and to the right to form line, and a column that has marched off left in front must wheel to the right and to the left. This must be the first exercise in which the squadron-leader will confirm his squadron; if it be correctly done, much will have been accomplished. After every change of direction the column should wheel into line to the front, and the flank should always get the signal "*Trot*" in time, so that the whole column may remain in movement, and the wheeling flanks may get a settled pace; the trot in line will then become perfectly easy. Changing direction on a movable pivot and marches in line must be considered as the fundamental movements; they must have become certain and steady before anything else is attempted, because their correct performance has the greatest influence on all other evolu-

tions. Through practising them the squadron will have become certain, both in pace and direction, will have become thoroughly acquainted with the four perpendicular and the four diagonal directions of the drill ground, and will thus most easily understand what they have to do at drill.

bb. Characteristic Faults.

1. The zug-leader's word "*March*," in wheeling, is given too late.
2. The pivot flank-guides look inwards towards their zugs, instead of straight forward.
3. They consequently describe too small an arc during wheels on a movable pivot, and the curve made is carried too much towards the wheeling flank.
4. The pivot flank-guides, during such wheels, have an aversion to ride right on to the rear of the zug in front, which checks the next following zug, and compels it to incline outwards.
5. The outward flank-guides try to fly out as far as possible, and so describe an enormous arc, so as to cover as quickly as they can the corresponding flank-guide of the zug in front.

c. Movements in Line.

aa. Essential Condition.

The essential point in marching in line is to keep it perfectly parallel with the original alignment, neither inclining to the right in marching to the front, nor inclining to the left when retiring. This grave but common fault, on account of which the left flank wavers to and fro, sometimes gets in advance, sometimes in rear, closes to the right, or receives a sudden shock from the right, and does not keep exactly the same pace as the right flank; all this results from the reprehensible practice of the 3rd and 4th zug-leaders, who dress by the eye on the 1st and 2nd zug-leaders. All zug-leaders must *look to the front and keep the same pace*. The 2nd zug-leader should occasionally assist his perception of pace by occasionally glancing to the left, and the 3rd zug-leader should now and then look to the right, as a sort of check upon his idea of pace; there will then be no vacillation, and both flanks will always ride at the same equal pace. The criterion, the touchstone, for marches in line, is that the right and left flanks move at a perfectly equal rate, without the line being broken, however extended it may be.

The very same fundamental principles apply to alignment on the move as to dressing at the halt. It all depends on the zug-leaders, on regular pace, easy and light feeling, and not on dressing by the eye right or left, just as on foot, where everything depends on equal pace and light feeling; but there is this difference, that as the rates of the paces on horseback can be much varied, the principle of regular pace must be more strongly insisted upon than on foot, and dressing by the eye must have less play. When in movement, each man looks straight to the

front, follows his zug-leader at exactly two paces distance, takes care to maintain a steady equal pace, to which he must have become habituated by the riding-school and individual riding, glancing only occasionally right and left, so as to assist his feeling and help him in judging his pace. If he looks too often or exclusively one way, he will involuntarily press to that hand, which is most detrimental. As at the halt, the placing of the horses square to the front is of the greatest importance, so is riding straight when mounted; and this is only to be attained by looking straight to the front, taking the alignment from the front, from the zug-leaders. The command "*Eyes right*" or "*Eyes left*" simply means that the *feeling* is to be taken from the hand named, pressure from that hand is to be yielded to; it does not mean that the men are to take the alignment from that hand. It follows from this that the squadron-leader should never ride on a flank and from that position regulate and correct the alignment, but he must do this from the front, from the centre of his squadron, as has been previously insisted on, so that the men may have no inducement to dress by the eye.

For the alignment of cavalry there are only these fundamental principles:—

1. The alignment must always be taken from the zug-leaders, both when halted and on the move.
2. The exact rates of pace must be maintained.
3. The horses must stand square to the front at the halt; men must ride and look straight to the front when on the move.
4. A light feeling must be preserved, and if ever it should be lost it must be regained very gradually; all faults in general must be corrected very gradually.

As the march in line is the very life of cavalry, since it only takes this formation for the attack, the strict observance of the principles on which its proper execution depends is of the highest importance; for only by carrying them out will it be possible to move long lines and throw them on the enemy at the greatest pace, without wavering, but with calm, good order, and certainty. For this the following conditions are necessary:—The direction must be taken up simultaneously, as quickly and surely as possible, by all the units of the line. On actual service it will very frequently be necessary to change direction, either on account of the movements of the enemy, on account of the configuration of the ground, to carry out one's own aims, or for tactical considerations, so as to outflank the enemy; it is therefore necessary that every endeavour should be made to accustom cavalry to take new directions as promptly as possible, otherwise nothing but the greatest disorder will be the result. This can only be attained by very frequent practice on foot and on horseback, with strict observance of the preceding principles, which must be carried out in their entirety; working on the diagonal, forming oblique fronts, wheeling zugs half-right and

half left, passing from one diagonal to another, must be incessantly practised. These exercises must be commenced by squads and zugs on foot, so as to be properly prepared to carry them out mounted. Formations to perpendicular fronts must only be made occasionally, and oblique fronts should usually be formed. The men must be most carefully accustomed to give way to all pressure from the directing flank,* and the directing flank should not have to give way, as so often happens, to the pressure of the squadron, in order to avoid crowding in the ranks. To this end it is a good plan for the directing flank, for instance the right flank-guide, to bear a little to the left sometimes, so as to accustom the men to give way gradually to pressure from this point; similarly after wheeling about by zugs ("inversion"), the left flank-guide of the first zug should sometimes be allowed to bear to the right, so that the men may yield to the pressure, and not be pushed aside mechanically, may ride as independent individuals, and apply the proper leg, so as to keep away from the directing flank. The directing flank-guide must under no circumstances yield to pressure.

bb. Characteristic Faults.

1. The squadron-leader, in order to regulate the alignment, places himself on a flank instead of being in front of the centre, which gets the men into the habit of dressing by the eye, and causes variation of pace and direction.

2. The 3rd and 4th zug-leaders have a tendency to dress on the 1st and 2nd, which strengthens the bad habit of alignment by the eye, and directly produces variation of pace and loss of direction.

3. The men especially do not look to the front and follow their zug-leader at two paces distance.

4. There is a tendency to wheel towards the right in advancing, to the left in retiring (after the wheel about of zugs), in consequence of which on halting after the movement another front is formed, and the new and original alignments are not parallel.

5. The 4th zug gets in advance or rear of the alignment, hurries or checks, fluctuates and opens out, wavering right and left; in the 1st zug the men are too close.

6. In advancing, the right flank-guide is forced away to the right, and *vice versa* in retiring.

* These directions were issued before the introduction of the Regulations of 1873, according to which the direction when in line is taken from the centre; but they are still applicable, as the faults alluded to characterise and often recur even now that the direction and feeling are taken from the centre. [The following instructions for flank-guides are equally applicable to our "centres of squadrons."—*Tr.*]

*d. Breaking into Column of Zugs from Line.**aa. Essential Condition.*

The point in breaking into zugs from line is this: supposing the squadron to be in line at the trot, and the command is given to form column of zugs from the right (*"Mit Zugen rechts brecht ab"*). The 1st zug continues to march forward at the trot, the other zugs halt. The 2nd zug receives the word, *"Right incline, March,"* as soon as the rear rank of the 1st zug has passed its front rank; the zug first trots straight forward, and then gradually inclines so as to cover the leading zug, file for file, and to have its exact wheeling distance, taken from its own front to that of the leading zug, when the leader gives *"Forward."* Up to this point, [after commencing the incline] the right flank-guide of the 3rd zug must direct his horse on the left flank-guide of the 2nd zug, and keep one pace in rear of that zug; the 4th zug follows the 3rd in the same way. Fig. 14, Plate II.

Only when the 2nd zug-leader gives the command *"Forward"* to his zug, may the right flank-guide of the 3rd zug cease to direct his horse upon the left flank-guide of the 2nd zug, and very gradually endeavour, without altering the incline, to cover the preceding zug and arrive at the proper distance from it at the same moment.

The right flank-guide of the 4th zug acts in an exactly similar manner. In the same way, in advancing from the left by zugs, the left flank-guides of rear zugs (1st and 2nd) must direct themselves on the right flank-guides of the preceding zugs, until the moment when the latter receive *"Forward,"* up to which time too they must preserve the distance of one pace. From that moment they will gradually increase the distance from the preceding zug until it is exactly correct when the zug-leader gives *"Forward."*

The rear zugs thus obtain their covering and distance in succession, by inclining at the same rate, and not simultaneously, as one so often sees done. Only in this way will an orderly and equal incline be made by the zugs, and this common evolution be performed with regularity and without depending on chance.

In this evolution the zugs should not wheel half-right or left, but each man should incline, knee behind knee, and his horse's head half a neck behind that of the next horse, each zug remaining parallel with the leading zug.

bb. Characteristic Faults.

1. The flank-guides (right or left, as the case may be) cease too soon to direct themselves on the opposite flank-guide of the preceding zug, before the latter receives *"Forward."*

2. Two zugs cover the leading zug at the same moment, and the commands *"Forward"* to them are given simultaneously instead of successively.

3. The zugs wheel half-right or left, instead of inclining, which generally results from this, that

4. The flank towards which the incline is made inclines too sharp, and gains more ground sideways than it does to the front.

e. Forming Line from Column of Zugs.

aa. *Essential Condition.*

All formations of line should be made so that not a moment may be lost, and line may be formed as rapidly as possible. In forming line to the front* (*Eventail-Aufmarsch*), by the incline of rear zugs, the zugs must not incline too sharply, as by so doing they lose both ground and time. They should incline and advance equally.

In forming line (squadron) to the front on the left, the left flank-guides of the 3rd and 4th zugs should regulate their position by the corresponding guide of the preceding zug, until the latter receives the word "*Forward*" to move into line; the next following zug then gradually uncovers and gains ground to the flank while advancing, and should only have to advance the breadth of a zug to come up into line.

Similarly in forming line to the front on the right [the 4th zug being at the head of the column], the right flank-guide of the 2nd and 1st zugs must maintain their place with regard to the corresponding guide of the 3rd zug, until the latter receives "*Forward*," and changes its direction to the front; only then may they outflank it. The right flank-guide of the 1st zug maintains his position with regard to the corresponding guide of the 2nd zug, until the latter receives "*Forward*." In this manner all the zugs will come into line by a similar incline, by the shortest road, and as quickly as possible: thus each zug has only to advance *directly* for a distance equal to the breadth of a zug, there is no confused jostling of the zugs, and no zug is seen to incline too sharp at first and so to have to march straight to the front, which so often happens in this movement in regimental manoeuvres.

When forming on the move at the trot the rear zugs must ride rather in advance of the leading zug, especially at the gallop, and allow themselves to be caught up by those already formed, as dropping too soon into a slower pace causes loss of time and space, and the trailing of zugs one after the other is to be avoided. The zugs that have to form to the front must keep rather away from the zug which forms the base and marches straight forward, as in riding beyond the front the zugs are apt to wheel and to crowd towards the directing flank.

Zugs must not form line to the front by the half wheel, but by the incline, so as to come into line parallel with the leading zug.

* Called a "*fan movement*," as the formation from column to the front resembles the opening of a fan.—Tr.

If the zugs are to form line at the halt, the zug-leaders, on arriving in line with the rear rank of zugs already halted on the alignment, must give the command, "*Halt*," but on no account sooner; the leader halts with his zug, so that all may stand fast; he then, after a momentary halt, moves up into the alignment to take up the dressing, and having done this gives "*Eyes right* (or *left*), *Dress*," when the zug dresses up to him at two paces distance. These commands should not be given merely *pro forma*; they are given in order to be strictly carried out.

The formation of line at the gallop must be made at a more rapid pace than is ordinarily employed, and therefore the zugs must not on any account bear too much to the flank, so that the formation of the line may not be delayed, and the zugs may not have to ride too far direct to the front. This fault results from the outward flank-guides trying too quickly to clear the preceding zug, from fear of not having room to advance, instead of maintaining their position with regard to the preceding zug and not relinquishing it until it receives the word "*Forward*."

In order to obviate all misunderstanding, it is advisable that even with single squadrons, not acting in regiment, the rule for field movements should be adopted, viz., that on the command "*Form Line of Squadron Columns*," the advance of zugs shall always be made from the right of the squadron, and on the command "*Line to the Front*," line shall always be formed on the left, without any consideration whether this will invert the squadron.

bb. Characteristic Faults.

1. The outward flank-guides do not maintain the position of their zug long enough, i.e., until the word "*Forward*" is given to the preceding zug.

2. The zugs uncover each other so much, that those in rear go far too sharply to the flank before going forward into line, and thus go over a great deal of ground.

3. The zugs as they come up into line crowd towards the inner flank and press against the bodies already on the alignment, instead of keeping away, thus easily causing a change of direction.

4. Zugs form to the front by the half-wheel instead of the incline.

5. The pace is generally too slow in forming line at the gallop.

f. Formation of Half-column from Line by the Half-wheel of Zugs.

It is necessary to ground and frequently exercise the squadron in half-column, as it is indispensable in manoeuvring; it has the important effect of deceiving the enemy and enabling us to gain his flank. The squadron, however, must be very safe in this formation, especially when acting in large masses, otherwise it

will easily fall into disorder; and we know that in large bodies the mistakes propagate themselves to an enormous extent.

Squadrons must therefore be thoroughly instructed in these formations; the inner flank-guides, on whom the movements principally depend, must be perfectly acquainted with their duties, so that these evolutions may be performed as correctly and safely in brigade as in squadron, without any fear of disorder through the zugs being jammed together. To this end these evolutions must be practised in a systematic manner, first at the walk and afterwards at the trot, and always, at the commencement of the instruction, on perpendicular lines of the drill ground; thus will their most important object be attained, that of gaining the enemy's flank while advancing. In order to superintend the movement to the greatest advantage, the squadron-leader would do best to place himself on the outer flank of his squadron. Fig. 4, Plate I.

aa. Essential Condition.

In wheeling zugs half-right from line, they must be wheeled exactly half the amount necessary to bring them into column, thus taking a diagonal direction. The command "*Forward*," or the sound "*Trot*" or "*Gallop*," must therefore follow in good time, so that the zugs may not overwheel. The left flank-guides must maintain the proper distance from the left flank-guide of the preceding zugs. The same applies to the wheel by zugs half-left; the right flank-guides of zugs must maintain the proper distance for wheeling into line from the right flank-guide of the preceding zug, and keep well to the right and well up to the preceding zug, on no account dropping back, as is generally the case, since this causes dislocation of the half-column, especially when working in regiment, and produces the greatest confusion.

bb. Characteristic Faults.

1. Too much ground is gained to the flank as compared with that gained to the front.
2. The rear zugs do not keep their flanks up to a line parallel to the original alignment, and this does the greatest harm; much more rarely do they get over this line, and this usually occurs only when the zugs have overwheeled, which is to be avoided.
3. The inner flank-guides hang back, each one in rear exaggerating the mistake of the guide in front, which results in a totally different front being presented on wheeling into line.
4. The zug on the flank towards which the wheel is made, which gives the direction, over-wheels, in consequence of which the others fly out towards the proper front.

g. Formation of Line from Half-column.

The principles applicable to this are the same as laid down (p. 64) for the formation of line from column of zugs. The fault

there pointed out, that of the rear zugs gaining too much ground to a flank, is felt much more in forming line to the front from half-column, when the zugs nearly always go too far to a flank and afterwards have to crowd to the other side. Fig. 5, Pl. II.

h. Forming Zug-column from Half-column by Covering.

The rear zugs must not incline too much to right or left, but should rather prefer to advance. For the rest the instructions given (p. 63) for advancing in column of zugs equally apply to this, regard being had to the differences in the movements. Fig. 21, Plate III.

i. Advancing in Half-column from Line.

In advancing in half-column from the left, the right flank-guides must not hang back on the command "*Forward*;" and similarly in forming half-column from the right the left flank-guides must not hang back, but must on the command "*Forward*" ride quite square with the right flank-guides, or otherwise, on wheeling into line, incorrect fronts will be the result. This fault occurs very frequently, and indeed nearly always, if great pains be not taken to prevent it.

The covering and distances are the same as in the half-column formed by wheeling half-right or left by zugs from line (p. 65). The principles for advancing in zug-column from line (p. 63) also apply here. Fig. 4, Plate I.

k. Inclining in Line.

aa. Essential Condition.

In inclining to the right* on the command "*March*," every one must equally incline, and not the flank-guide only; the men must have knee behind knee, the nose of each horse opposite the middle of the neck of the next horse. The right flank-guide must be careful not to over incline, and having got his direction must ride straight forward.

Similarly in left-incline; the left flank-guide of the squadron must not turn more than half-left and must then preserve that direction, otherwise he will cause disorder in the squadron.

Every man must immediately take this position on the command "*Right (or Left) Incline*," "*March*," but must strictly preserve the pace, and maintain it throughout, closing the right or left leg according as the incline is made to the right or left.

The pace at the incline must be equal throughout, not at one moment quicker and then slower, owing to a check.

bb. Characteristic Faults.

1. The same direction is not taken by every man.

* In the German cavalry drill the incline is 45°.—Tr.

2. The flank-guide inclines too sharply, instead of equally advancing.

3. A partial wheel to the right or left is made, instead of simply inclining.

L. Wheels in Line.

aa. Essential Condition.

The same principles apply to the wheel of the squadron in movement, as to the change of direction of a column of zugs on a movable pivot, except that the pivot flank-guide circles freely at the walk instead of trotting or cantering short.

The leader of the zug on the wheeling flank must not himself maintain exactly the same pace as before, as there is half a zug beyond him (to the outward flank) which has to wheel at the previous pace; if the outward zug-leader, therefore, were to keep the same pace, he would either run away from his zug or cause it to rush; he must therefore ride slightly slower.

The leader of the zug on the inward (pivot) flank must accompany it carefully, describing an arc, so that his pivot flank-guide, who is half a zug's breadth from him, may describe his arc properly while advancing. If the officer did not do so the pivot flank-guide would get in advance, and the zug would form an arc round the leader, which ought not to occur; this, however, is a very common fault.

In the wheel of a squadron on the move, it is of the utmost importance that the inward flank-guide, as in the wheel of zugs, should describe a good arc while at the same time freely advancing, should look straight before him, should place his horse to the right in a wheel to the right, and to the left in a wheel to the left. The more he moves on with the wheel, the better will it be; only in the wheel on a fixed pivot must he stand fast.

The guide on the wheeling flank, on the command "*March*" (to wheel), shall continue to march straight forward for one or two horses' lengths before he begins to wheel, as in this way only can the wheel be done properly. He must maintain the original pace, without increasing it, and without looking inwards towards the squadron.

The leader must give the command "*Forward*" at least a horse's length before the flank has completed the degree of wheel required.

bb. Characteristic Faults.

1. The leader of the outward zug rides too fast, that of the inward one too slowly.

2. In wheels on the move the inward flank-guide, who forms the pivot, keeps his own ground, instead of moving freely at the walk while describing an arc in a forward direction.

3. The inward flank-guide looks towards his rank, thus pressing in that direction, with his horse inclined to the right

in wheeling to the left, and with his horse inclined towards the left in wheeling to the right.

4. The outward flank-guide increases the pace.

m. Squadron Drill (*Eskadronschule*).

aa. *Essential Condition.*

Before every wheel by threes at the walk, the squadron must always halt; and this is still more requisite when the squadron is at the trot or gallop before wheeling. This is necessary in order to perform the wheel steadily and with exactitude, as thus only can distances be preserved between threes. After completing the wheel, all must stand fast; in threes right the Nos. 1, and in threes left the Nos. 3 must not advance after wheeling, as is generally the case.

Squadron drill must be performed with exactness and precision; each section must keep together and one ought not to see the men wandering about looking for their places.

In diminishing to half-sections care must be taken that Nos. 1 and 3 of the front rank move off in good time (according as the column is right or left in front), otherwise the squadron will be disunited and the rear bodies have to ride much faster than the head of the column; this is a serious fault, as the first principle of our arm, *uniformity of pace*, is thus infringed.

In passing from half-sections to threes, and in wheeling threes right or left, each body must be most careful to keep its distance from the preceding one, and should only close up to it when it moves at the walk or halts, in doing which the pace will be increased. The movement of the last body must be at once followed by the sound "*Trot*," and similarly in zugs. The squadron-leaders must be quick with this, and here again the maxim "not too late" is to be borne in mind. We must begin with small things, so as to be able to act in the same way when working on a larger scale. Nothing in this respect is so insignificant that it can be neglected.

When in these long columns one sees better when the rear moves off too late; the rear must never wait till the head of the column moves off, as that causes rushing, checking, and variations of pace, which, under all circumstances, must be the same in rear as in front, and always uniform.

In wheeling on a movable pivot, the leading body must advance freely while changing direction, so as to leave the wheeling point free for the next body; otherwise the rear bodies, having no room, can get it only by swerving outwards.

Squadron-leaders must give their commands from near the middle of their squadrons, where they can be heard by all. Commands and trumpet sounds should always be delivered while turning towards the rear, so as to ensure its moving off. There is nothing more unsoldierlike than for the rear to lose distance and then rush up.

bb. Characteristic Faults.

1. The pace is diminished in moving off by threes and half-sections; it should be no slower than in zugs or line, but must always be the same.

2. The signal is obeyed too late, especially by the rear, which always waits for the head of the column to move off.

3. One sees alternate rushing and checking, and variations of pace.

4. In breaking into half-sections, the Nos. 1 and 3 of the front rank move too late, in consequence of which—

5. The column is disunited, and the rear bodies have to increase their pace.

6. Distance is lost between contiguous bodies in passing from half-sections to threes, and in going threes right or left; several bodies form at the same time.

7. There is bad wheeling on a movable pivot, bodies inclining outwards instead of describing the arc of a circle.

8. The horses of the numbers which ought to turn on their own ground rein back, which cannot be tolerated. These men should turn on the centre, and must do this by the leg without allowing their horses to rein back, otherwise the wheel will be badly done and the next body will be put out.

*n. Parade March by Zugs.***aa. Essential Condition.*

The march past at the walk, which should never be practised at the beginning, but only at the completion of drill, is, as regards the bearing and position of man and horse, only a result and proof of the good training of both, and also of good individual riding; in this respect only is it of any value.

The alignment must not be regulated by eye, for then, owing to the anxiety of the men, it will never be correct, and checks, collisions, and rushes to the front cannot be avoided; it must rather be kept by uniform pace and light feeling. In the march past all turn the head towards the inspecting officer, and look frankly at him. Sudden checking because the next man hangs back, or rushing up because the next man pushes in advance, are equally to be avoided; the faults of others are not to be imitated. Calm, freedom of pace, and alignment will be much facilitated by the men riding at slightly wider intervals and taking lighter feeling. The rear rank must dress simply by keeping one pace distance from the front rank, and not by eye.

bb. Characteristic Faults.

1. * * * *

2. The correct distance between zugs is not kept.

* Portions of this section have been omitted as not applicable to our drill.—TR.

3. Squadron-leaders march too close up to the preceding squadron.

4. The pace (walk) is unequal, jerky, and not free enough.

5. Alignment is kept by the eye, in consequence of which there result loss of cadence, continual checking, crushing and rushing, and hanging back of the outward flank.

3. *Concluding Remarks.*

In the preceding pages I have laid down the principles and system according to which the various evolutions should be performed, and the directions and instructions for the different movements of the squadron, and have done so because I am convinced that although there is no lack of good will, still much is not understood; opinions are very unsettled, and the correct method is wanting. Now as everything depends on this method, and it is only a fixed system that can produce satisfactory results, I have therefore detailed these fundamental principles for the benefit of the service generally, and as an assistance to individual officers. These principles should be preserved and watched over. It is not sufficient to read through such instructions once, that will do no good; squadron-leaders should make extracts from them for themselves, and carry them out in daily practice.

Many will perhaps be deterred by the method which prevails throughout these instructions, and it may appear to them to be pedantic; but argument on this subject is out of the question. Provided the method does not stifle the spirit, it can do no harm. At the least it will form conscientious, skilful workmen (I hope the use of this expression will be pardoned and not misunderstood, for in a certain sense we are all workmen and especially when in the lower ranks), and it is these workmen, and not only the men of genius, who win battles. Genius no doubt is required in the field, but elsewhere than in the squadron that is engaged; and even where genius is required, it cannot do without method, for true method is the father of order, and this is the foundation of the whole military organisation, and especially so with regard to the movements of our arm, which, on account of its mobile character, can less than any other do without method. These remarks address themselves to those who are apprehensive lest the spirit should be choked in the stiff forms I have prescribed; there is, however, a great deal more of the spiritual element in these forms than they think.

d. FUNDAMENTAL PRINCIPLES FOR THE ATTACK, MÉLÉE, AND RALLY.

The real sphere of action for cavalry, its decisive influence on the enemy, in short, the very life and soul of our arm, is the charge. This is the culminating point of all instruction, and may truly be looked upon as the touchstone and gauge of our work. In it the greatest calm, certainty, cohesion, and order must be united with the greatest vehemence and rapidity. The

men must strictly adhere to the pace sounded, and the horses must not be allowed to cause any opening out of the ranks through swerving, galloping when the rest are trotting, or changing legs when at the gallop.

The attack can only reach perfection at its culminating point, the actual charge, when the squadron is able to maintain a long racing gallop with order, calm, and certainty, without rushing to the front, getting out of hand, or commencing the charge before the leader intends it, or before he has given the command for it. Then only will the attack be well delivered when efficiency has been attained by the individual training of man and horse, by exercises with well-closed ranks, and practice in protracted gallops, the horses being in equilibrium, well placed, and thoroughly in hand; that is, when the whole force reaches the enemy with closed ranks and simultaneously.

The criterion of the charge is:—

1. There must be the greatest cohesion; the flanks closed well to the centre and no opening out. But by cohesion is not meant that the men are to be jammed together, for this only produces disorder, men being forced out of their places, the number of ranks increased. The greatest care must be taken that the flank-guides of the squadron do not swerve outwards, but keep the squadron together towards the centre.

2. There must be no depth; especially the rear rank must keep together and no one drop back.

3. The ranks in the charge must be kept intact, viz.: (a) the line of officers, the zug-leader being well in front; (b) the front rank; (c) the rear rank, 2 to 3 paces from the front rank; (d) the serrifiles. On no account ought 6, 8, or even 10 ranks to be seen and the depth of the squadron thus increased; this must be absolutely insisted upon.

4. The full gallop must be kept up for 600 to 800 paces, calmly and evenly without rushing, and the horses in hand.

5. The charge, made with the greatest rapidity, decision, and vigour, must be commenced at least 120 to 150 paces from the enemy.

For this the horses must have been well trained individually, so that the charge may be vigorous; but this will only be good if the prolonged gallop has been assiduously cultivated, at an even and regular pace, without rushing or disorder.

Next, the following fundamental principles must be attended to:—

1. Before the attack the leader must always have reconnoitred the enemy.

2. The leader must charge at the opportune moment without waiting for a special order; he must never allow himself to be attacked by the enemy, or wait for him at the halt, but should always attack him first.

3. During the advance to the attack, éclaireurs must always be sent ahead to reconnoitre the ground and point out the best routes for the squadrons. Just before the shock they must clear

the front, making for the flanks of the squadron or of the enemy.

In the cavalry of Frederic the Great the squadron-leader was authorised to sabre any *éclaireur* met riding at random across the front; a proof how indispensably necessary it was considered, that in the attack no disorder should be produced in the ranks.

The King, moreover, says in one of his Instructions, "ten men on the flanks and rear (of the enemy) do more than one hundred riding in front."

4. The attack must be made as frequently as possible in inverted order to accustom the men to this, so that they shall not feel strange in this formation, but rather consider it a second nature. No squadron-leader ought to hesitate to form in inverted order when the enemy appears in a direction requiring it.

5. During the attack, when at the trot or gallop, the squadron must continually manœuvre and change direction as often as possible, as well to gain the enemy's flanks and surround him, as to oppose his movements with activity and success. No attack should be consummated in the same direction as it was commenced in. The tactical conditions of the present day make this an absolute necessity, and squadrons cannot be sufficiently mobile.

It must therefore be a principle during the attack at the trot and gallop, to keep changing front, wheeling to the right, left, half-right, half-left, or wheel by *zugs* half-right or left from line, again wheeling into line or forming column by the rear *zugs* covering, and then wheeling into line so as to attack in an oblique direction. An attack direct to the front must be an exceptional thing; to advance and at the same time gain ground to a flank must be the rule, and one that cannot be too rigorously observed.

6. It is of the highest importance to regulate the attack properly. The horses must reach the adversary in good wind and with their full powers, so as to be able to pursue a flying enemy or to resist any intact body immediately after the former has been charged. It must therefore be a fixed principle not to assume the increased pace until we are certain that the enemy cannot be reached at a slower pace, or when we have approached him so closely as to be able to run him down by the shock of a charge, or when, in the attack on infantry, we have entered the sphere of most effective fire.

For peace manœuvres, we may take as the rule to begin the attack at the walk, then pass to the trot, which must be continued for about 1,000 paces, and then commence the gallop; the last must be kept up for 600 paces, or, in the attack on infantry, for 800 paces; the charge, on the command "*March! March!*" will be of 120 to 150 paces duration.

The time required for the attack would accordingly be as follows:—

1,000 paces at the trot	=	3 mins. 20 secs.
600 " gallop	=	1 " 12 "
150 " charge	=	0 " 9 "
<hr/>		
Total.. 1,750	=	4 " 41 "

Against infantry we require—

800 paces at the trot	=	2 " 40 "
800 " gallop	=	1 " 36 "
150 " charge	=	0 " 9 "
<hr/>		
Total.. 1,750	=	4 " 25 "

This will be the normal attack at the present time in which the trot takes the chief place. Of course some variation in these figures would be caused by accidents of the ground and other circumstances.

It is good practice for the superior officer to make the squadron charge him, the centre of the squadron being directed straight on him. If he changes his position frequently during the attack, the latter must be conducted with entire reference to the moving object, and the correct direction must be taken by means of change of front, so that the actual charge may follow at the right time and place.

7. With the view of gradually increasing the powers of the horses and getting them little by little in good wind, it is requisite to accustom them to passing over long stretches of ground, in column or line, at the trot or gallop, varied by occasional wheels and evolutions.

Frederic the Great wished that his cavalry, after passing over 2,000 paces at full gallop, should be able to keep up the charge for 200 paces, and he had this done at his special reviews.

Very gradual progress is requisite for this end, so that the horses may not lose condition. The best way is to pass over long stretches of ground within the limits of the drill-ground at the trot and gallop, followed by a wheel into line, and to continue at one of these paces, wheeling, &c.; this is a very simple way of gauging the progress gradually made.

For acquiring the ability to maintain the extended gallop, as cannot too frequently be repeated, too much attention and intelligence cannot be exercised; it is simply the result of collecting and suppling the horses, of the collected gallop with the head in its proper position and the hindhand suppled. If this has not been previously acquired, the extended gallop will always be unsteady, violent, and without cohesion; the horses will not be in equilibrium, and some of them will run away.

During the preparatory drills it is advisable to practise the wheel in line at full gallop, so as to have both men and horses thoroughly in hand, and then when all are calm and the line moving with regularity, the command "*March! March!*" will be given; this must be done in a loud tone and with energy.

8. As the charge is the vital element of our arm, the touchstone for the whole instruction, to which too much importance cannot be attached, we ought not to avoid it or exhibit it merely at inspections, on the ground that we wish to keep the horses quiet; it must, on the contrary, be practised with the greatest care and thoroughness. Thus only can the charge be perfected. I distinctly oppose the view, so often expressed, that charges are always best when they have not been previously practised; such attacks always fail.

With young soldiers, the best way to re-establish calm and steadiness after a charge, is immediately afterwards to attack at the gallop only, just as, during individual instruction, the charge is succeeded by the trot or gallop.

If we had old soldiers all these precautions would not be necessary; but with our young soldiers everything should tend to this, that while working with the greatest speed they must have their horses thoroughly in hand.

In order to attain this it is advisable to practise the charge daily in different directions; if it is done every day in the same direction the horses get to know the place where the gallop and charge begin, and become more unsteady each time.

For the latter reason, too, in order to have men and horses in hand, it is also good not to complete the attack by charging, but only to proceed as far as the gallop, changing front at this pace, and then diminishing it to the trot.

And in general the charge should never be executed either in zugs, by ranks, or with the whole squadron, until the leader is convinced that every horse can keep up a prolonged racing-gallop calmly, perfectly straight, and without changing legs. This must be strictly adhered to or the horses will be made wild, unsteady, and violent, especially if they have been badly bent and otherwise not well trained.

9. The swarm-attack* need but seldom be practised as it is not difficult to execute, and it is very prejudicial to the charge with close files, the very ground of our efficiency and the ultimate aim of all instruction.

It is only of value on account of the exercise in rallying which follows it, but this can equally be practised by supposing a *mêlée* after a charge at close files, so that the swarm-attack becomes unnecessary for this purpose; moreover the rally after a swarm-attack, on the signal "*Halt*," is very easy. Still, it should sometimes be practised, followed by a pretended retreat so as to induce the enemy to pursue in loose order; here everything depends upon the unconditional response of the men, the nimbleness of the horses, and the most rapid formation of ranks on the signal "*Front*."

At the signal "*Appell*" or "*Retraite*" during the advance, the men turn left-about independently and retire in loose order at the full gallop; on the subsequent signal "*Front*," each man

* Corresponding somewhat with our advance by extended files.—Tr.
(I. C.)

promptly turns left-about to the front, the whole closing together, and an attack in line follows. This mode of proceeding was frequently used by the Prussian cavalry in 1806, 1814, and 1866 to the great discomfiture of the enemy.

10. The most dangerous moment for cavalry is immediately after the charge; order, calm, and cohesion cannot be too quickly re-established so as to be prepared for every eventuality.

No exercise, then, is more necessary than the practice of rallying with the greatest rapidity from a state of complete disorder; this should be done while advancing in any direction, forming either in line or zug column, and should be at once followed by evolutions, the squadron being merely rallied and not told off. The squadrons must be thoroughly accustomed to breaking up and again rallying. He remains master of the field who has the last-formed body in hand. The great Frederic says, "it must be impressed on the men that one dragoon can do simply nothing, but a squadron can do much."

In order to accustom the men to rally as quickly as possible from the greatest confusion, such as would result from the *mêlée* after a charge or swarm-attack, and to form in the most perfect order, it is useful to come to the trot after a charge, and then without halting to suppose a *mêlée*, the men riding in all directions, cutting and pointing at pleasure. On the trumpet-call the squadron must rally as quickly as possible in rear of their leader, who indicates the direction to be taken by his sword and the position of his horse. During the rally it is merely necessary that each man should join his own zug and rank so as at once to form closed ranks, with a view to the squadron being ready for any evolution, but it is not necessary that the men should be in their proper places.

This should be frequently practised, at first at the trot and gallop, and later on at the fanfaro-gallop and full charge.

After the preparatory exercises the rally must always be effected as quickly as possible at the rate of charge and in a forward direction, never at the halt; the sound "*Trot*" is only applicable to this advance and not to the rally on the "*Ruf*" sounded in the charge. This must be strictly adhered to.

The rally after the attack must be practised in every direction, except to the rear, and generally in an oblique direction towards the front or to the flank, and on the move. It would be unnatural to rally in the form of an obtuse angle, as the enemy cannot be supposed to be everywhere. As soon as an attack has been made the squadron-leader should lead his squadron in accordance with a previously formed idea, and work to a certain front, a flank at right angles to it, and another between the two.

As already mentioned, the men must practise rallying, not only in line but also in squadron-column, on the corresponding sound which will follow the "*Squadron call*." If the squadron was inverted at the time of the attack, the men must rally in that order; this therefore should be practised.

An acknowledged authority on our arm says: "That cavalry remains master of the field and gains the victory, which can most quickly rally and re-form."

We must therefore habituate our men, and make it a second nature to them, to rally and form ranks, even from the greatest confusion, so that it may come to them naturally and by instinct to find their places again in closed ranks. For this is required unconditional response of the men to the signal, even in the tumult of the fight; they must be quick in observing their position, and be able to move their horses in a handy manner, so as to make them do what they want.

Morale and discipline must do the rest on service, but the foundation can only be laid by the almost daily practice of the preceding exercise. It must become a mere matter of habit and be ingrained in the flesh and blood of all.

e. INSTRUCTION FOR THE INSPECTION OF A ZUG AND SQUADRON MOUNTED.

The following directions comprehend not only a recapitulation of the Regulations on this subject, but they also develop my views on the training and leading of cavalry, and the mode of showing it up for inspection, which I have acquired during my service under the command of able cavalry leaders, and which for the most part have become the traditions of our arm. In exhibiting these fundamental principles, I have had in view to give a firmer foundation, the truth of which has been verified by results, as it has contributed to make our views on the leading and showing up of troops much clearer, and thus led the way to greater certainty and precision on this important point.

My earnest wish is that the principles exhibited in these directions may be of use to our arm; but before all we must have animation and mobility, decision, energy, *savoir faire*, and foresight, an ardent desire on the part of the leader to arrive always at the right time, never reaching the proper place too late, and doing this always by the shortest route and the simplest evolutions.

The greatest rapidity and the most perfect order, which is synonymous with calm, must be combined; the former must be developed to the utmost degree attainable, without however interfering with the latter, which is mainly dependent on the leading and mode of giving words of command. Only by satisfying these conditions will our arm be able to fulfil the duties imposed upon it, duties which are gradually becoming more difficult.

I. THE MOST IMPORTANT PRINCIPLES AND RULES REGARDING THE INSPECTION OF A ZUG MOUNTED.

1. The zug-leaders, at an inspection, should show the following movements and evolutions.

The so-called Squadron-drill (*Eskadronschule*) viz., wheeling threes right (and left); diminishing to column of threes after threes right (or left), and from threes to half-sections, &c.; inclining when in column of threes; forming line to front and flanks from threes; wheeling threes about, &c.

Then come movements in line direct to the front and in oblique directions; inclining when in line; wheeling right, left, half-right, half-left, right and left about; wheeling from one diagonal direction into another; halting at the trot, moving off at the trot from the halt.

Next, movements to the front at the gallop as at the trot, in perpendicular and diagonal directions; breaking into the trot from the gallop, and halting at the gallop. These evolutions should be arranged by the leader with judgment, and should be made to follow each other in a systematic manner.

Thus in the squadron-drill, what has been done to one hand should not be immediately repeated to the other. When the squadron-drill is shown to the right, the head of the column should always change direction to the left, and so on. No movement should be shown twice to the same hand, but alternations and changes must be introduced so as to make the drill interesting, and to give the inspecting officer an insight into the ideas, intelligence, and judgment of the leader, and the care taken in his elementary training. Mechanical and routine drill, executed according to a given model, must entirely disappear.

2. When every latitude is given to the zug-leader, he should do nothing that has not been previously practised, and of the exact and smart performance of which he is not quite certain.

3. No evolutions should be shown at the walk; the slowest pace should be the trot. It is good to exhibit a gradual increase in the difficulty of the movements. From the slower paces, too, we should rise to the more rapid, and not in the opposite manner; and similarly we should proceed from movements in the perpendicular to those in the oblique directions, which should especially be shown, and wheels from one oblique direction into another.

4. The leader should not hug his zug, but should keep at such a convenient distance from it (rather too far than too near) that he can be seen by all his men, and his command can best be heard and understood. He should always be in front of the centre of his zug, and especially in windy weather should mind that all his men, both at the head and rear of his zug, are able to hear, and so to obey, his word simultaneously.

5. It produces a good impression, if the leader moves smartly and adroitly in front, and rides steadily and with certainty instead of yawning about without aim or purpose. If he rides at a rapid pace, the reason for so doing should always be apparent, and, unless there be a good reason to the contrary, he should ride in front of the centre, and at the same pace as his zug.

6. The very manner in which the leader gives his command

has much to do with the success or otherwise of the inspection. The cautionary should be properly distinguished from the executive word of command, and there must be an intermediate pause between the two; the caution must be given calmly, smoothly, deliberately; this gives the party calm and steadiness, even in the most rapid movements. The executive word, on the contrary, must be given with force and energy, and should be short, well accented, and decided; if it be so, the leader can rely on his command being executed with precision and smartness. Every command must be loud enough for every man of the zug to hear it.

The leader should not be careless about his word of command, whether at an inspection or on other occasions when he is alone; he should never give a command in a slovenly manner, in an undertone, or without accent, for the mode of executing an order will correspond with the negligence of manner in which it is given, and this carelessness will have a bad effect on the men.

7. Commands must be given exactly at the proper moment. In the wheel of a zug, for example, the leader must not give the word "*Forward*" too late, a very common fault; he should give it in time, so that the wheeling flank may not have to check or halt, nor wheel too far, but may move on in the desired direction in such a manner as to preserve a smooth and even motion.

In increasing the front (on the move) from half-sections to three abreast, or from the latter to threes (six-abreast), the rear bodies must not be compelled to come to the walk, but the command "*Trot*," must be given in time, so that the rear body may never cease to trot, and the zug may take up the trot just as the rear-most body comes into its place.

The commander should direct both his glance and voice, on giving a command, towards those men whom he knows to be the worst and slowest in obeying orders, men who are always late and wait for others; this is generally the case with the rear, both in increasing and diminishing the pace. This fault can easily be obviated by giving the command in the required direction with accent.

8. The commands "*Squadron Forward*" and "*Squadron About*" are to be given as preparatory words, smoothly and without break; and similarly, "*Dismount*" and "*Mount*," but in the latter the men must conform with the time prescribed for the different motions. The command "*Dress*" ("*Richt-Euch*") requires a different accent, according as the men are to advance after it, or are to get a better dressing at the halt. If a new alignment is to be taken up the command "*Richt-Euch*" is given with a pause between the two words, but if the dressing is to be taken up at the halt, "*Richt Euch*" is given, without any intermediate pause. The commands "*Attention*" ("*Stillgestehen*"), "*Dress*" are not connected with each other, as one generally hears them given; each has its peculiar meaning and object. On

the command "*Attention*," the men have simply to sit still, and place their horses straight to the front, the indispensable preliminary condition for all dressing; on the command "*Dress*," the correct distances previously named are to be taken, two paces from front rank to the zug-leader, and one pace between ranks.

9. The zug-leader should always begin the inspection with a forward movement at the trot, then wheel and commence the squadron-drill; the inspection should also be concluded by a movement in line at the trot or gallop.

10. The ground at disposal must be correctly calculated; the leader should know its bearings and take care to have room for each evolution. He should not have to halt, and bring the inspection to a close, owing to his having reached the boundary of the ground and thus having no room to move any farther.

11. The evolutions should not follow each other too quickly, but the development, execution, and conclusion of each movement should be clearly seen. The leader should march on long lines and give extension and room to his evolutions, which should not follow each other so closely that one begins before the previous one is ended; this generally betokens incorrect appreciation of the ground, and absence of foresight and judgment, owing to which enough room is not left for each evolution. Such a reproach the leader of any body of cavalry, however small, should not incur; he should always have a correct idea of his bearings, be able to see ahead, and never do anything too late; all this is quite contrary to the cavalry spirit, and he should from the first strive to avoid these, the worse faults of our arm. The whole inspection should be characterised by animation, life, and movement.

If the zug-leader takes the trouble to attend to these principles in the drill and inspection of his zug, he will show it in an advantageous manner, will exhibit its training in the best light, and produce a favourable impression; after that he can prepare himself to lead larger bodies, such as a squadron, and acquire the routine necessary for a leader of cavalry.

II. THE MOST IMPORTANT RULES AND PRINCIPLES FOR THE INSPECTION OF A SQUADRON IN MOUNTED MANŒUVRES.

1. *In General.*

An expert will be able to see at a glance when a squadron has been thoroughly drilled; he will observe that the following matters are attended to:—

a. All commands and sounds will be obeyed simultaneously by the head and rear of the squadron, and in the quickest manner; all will at once commence the movement on the signal being given, and on the sound "*Halt*" will stand fast without any movement whatever.

b. They will ride at the exact pace ordered, which shows that the men in the ranks are really riding their horses and have them in hand.

c. In wheels into column, into line, and about, the inward flank-guides will stand firm as rocks, whatever the pace may be, without attending to the rest of their zug; and the outward flank-guides will steadily maintain the original pace.

d. The true principles regulating the important movement of changing direction on a movable pivot will be observed, on which principally depends the ability to wheel in column without the slightest hesitation or check being observed; they will not fly outwards away from the pivot hand, but maintain their touch from it, so as to lose no ground or distance, thus preserving the fundamental condition, strict uniformity of pace.

e. All wheels on the move, whether in zugs or squadron, will be made on a movable pivot, a large arc being described in a forward direction.

f. The commands of the zug-leaders must be obeyed to the letter, without the men considering whether the zug will make a mistake by carrying it out; this is absolutely essential.

g. The grand fundamental principle of all evolutions is uniformity and evenness of pace; this important condition of cavalry movements must never be lost sight of, whether in column or line, even if distance in column or alignment in line be lost for a moment; for it is only through it that safety, steadiness, and preservation from accident and external disturbing influences can be ensured, and the costly horse material be preserved. Wherever these principles are deviated from and offended against, there we shall see the worst riding and drill.

h. If the squadron has acquired dexterity and handiness, it can at once, after any evolution, take up and maintain a new direction, whether perpendicular or oblique, whether in retreat or to the front, after the signal "*Front*," whether in breaking into half-column from line, or after advancing in half-column.

i. The flank-guides will be well-instructed and certain about their duties in breaking into zugs and reforming squadrons from zugs.

k. The true principles for all marches in line will be strictly observed; there will be no dressing by eye, and the 3rd zug-leader will not conform with any vacillations of the 1st and 2nd zug-leaders.

l. Under all circumstances, the rear rank will keep a good pace from the front rank, and never close up or over-ride it; it will ride as independently as the front rank, and at the gallop will keep at the least two or three good paces from it.

I affirm that when a person of experience sees that these fundamental principles are strictly observed by a squadron, he will arrive at the conviction that it has been thoroughly grounded and welded together by its leader; it only remains then to conduct the inspection-drill so as to exhibit as clearly as possible the thoroughness of its instruction. Even with a perfectly instructed squadron, much, if not all, may be spoiled by the manner of conducting the drill; and, on the other hand, by an adroit leader,

many faults in the training may be concealed and glossed over, especially if the inspecting officer be inexpert.

Much will depend upon the leader, how he carries himself in front of his squadron, whether he rides briskly and smartly, or rushes about wildly and without purpose, whether his horse is well in hand, and is swift and handy: further, the result will be much affected by the leader's giving his commands at the right place, from which he can be heard simultaneously by all: by his giving the cautionary words smoothly, and not hurriedly, so as not to disturb his men, the executive commands (which must not follow too quickly) being short, energetic, and well accented, so that the movement may be performed in a suitable manner; if these commands be given in a drawling and indolent tone, they will be carried out in a lax and sleepy manner.

These are the demands made on the leader for each movement, even the simplest; if he does his utmost, and puts his whole heart and soul into the work, he will get his men to pay attention, to take an interest in what they have to do, and to display the liveliest zeal and activity; emulation will be excited, so that the very highest conditions may be fulfilled.

Naturally every squadron-leader who has trained his men with intelligence and thoroughness, will wish to present his squadron in the most favourable manner, and to exhibit their good qualities to the greatest advantage, and this he will succeed in doing if only he carries out the principles on which the favourable showing up of a squadron must depend.

These principles and rules are the following:—

2. In Particular.*

a. The squadron-leader should always bear in mind that in our arm the leader is everything, and his riding, his movements, the direction in which he places himself, his bearing, have the greatest influence on his squadron and its performance, and also on the opinion that will be formed of it. Squadron-leaders frequently misunderstand their duties; they think that if they only ride fast and move about here and there, they best fulfil their duty and produce a good effect. This is by no means the case, and it only causes unrest in the squadron. It is of course indispensable for a leader to ride briskly and in an energetic manner, but only when he is getting into the place where he ought to be, where his presence is necessary or laid down in the Regulations; there must be no useless galloping: his riding should produce the impression of firm seat, certainty, and steadiness, and yet of energy and life. In wheels of the squadron in line, the leader must ride at full gallop to the new front, and give the command "Forward" or "Halt," facing the squadron; and similarly in forming line, he must ride rapidly in advance and face the

* Several omissions of unimportant details have been made in this section.—Tr.

squadron while giving "*Halt*." He should never hug his squadron, but always keep at a considerable distance from it.

b. The correct regulation words of command must become part of our being, so that it will be impossible ever to give a wrong one; the accentuation should be correct and natural; preparatory cautions must be given smoothly, and executive words, well distinguished from the former, must be given with energy and decision, so as to cause rapidity of execution.

The squadron-leader should take care that trumpet sounds are blown at the right time, and it is a simple and soldierly way to accustom oneself to giving the trumpeter the caution "*Sound*," on which he will put the instrument to his lips, and then "*Trot*" or "*Gallop*," instead of saying "*Sound so and so*," or "*When the zug, &c., arrives at such a point, sound the trot*." To decide the time and place for sounding is the leader's business, not the trumpeter's.

c. At an inspection nothing should be heard but the commands and trumpet sounds; all talking in the squadron must be strictly forbidden.

d. The leader who is showing up a squadron should carry his sword, blade perpendicular, hilt on the thigh. * * * In marching past (by single file) the squadron-leader should not fall out too soon, but must pass straight before the inspecting officer before he does so. * * *

e. The squadron should be formed for inspection close to the point where the inspecting officer will enter the ground, and not at the other end; it should face the direction from which the inspecting officer will come. * * *

f. Dressing the squadron at the halt should be done as seldom as possible; long and frequent dressing is death for our arm; it should only be dressed when line is formed from the halt. On the command or sound "*Halt*," every one must stand fast; there must be no reining back or movement of any kind. Placing the horses straight to the front is dressing, and alignment is very quickly taken if this has been done properly and the correct distance taken from the front from the zug-leaders.

g. The rules for giving the commands "*Attention*," "*Dress*," "*Dismount*," "*Mount*," have already been given (e. I. 8). The mode of giving a command makes an enormous difference in the execution of it, as previously stated (e. I. 6).

h. After forming line from the halt, the squadron-leader will never give the command to dress; it has already been given by the zug-leader, and the alignment will have been taken up, as each zug comes up into line on its own account.

i. The rules for sounding or giving the word "*Trot*" in forming line from zugs or threes have been given (e. I. 7).

k. The squadron should as much as possible remain in motion, and therefore in wheeling the word "*Forward*" must be given in time to prevent checking, the wheeling flank maintaining the original pace throughout, the pivot flank taking up the pace again on the word "*Forward*."

1. The mode of giving words of command to a squadron in column has already been explained.

3. *The two Modes of conducting an Inspection.*

Either the inspecting officer leaves it to the leader to show what movements he will, or he states what he wishes to see done. In the latter case the principles laid down in II, 2 of this chapter will apply. If the inspecting officer names a whole category of evolutions which he wishes to see (such as all wheels into column, into line, about, and on a movable pivot; all diminutions and increasings of front; all movements in line; movements in half column; squadron drill), the leader should make a suitable distribution of the movements, leaving nothing out, and should take care always to keep so far from the boundaries of the ground that he may not be compelled in order to get out of difficulties to execute unintended and trailing movements such as are quite contrary to the cavalry spirit. This should especially be considered when the inspecting officer gives the leader *carte blanche* as to the movements he shall perform, and for an inspection on these conditions the following principles should be kept in mind, in addition to those previously given.

4. *Additional Rules.*

a. For an inspection, a general idea should be decided on and thoroughly matured, so that one may be well prepared for the event. It is necessary to have made up one's mind beforehand as to what shall be shown, how and in what order it shall be shown, so as to exhibit the attainments of the squadron in the most favourable manner. The leader should not trust to a sudden inspiration from on high, as is so often the case; a good inspiration at the right moment only comes to the leader who is thoroughly bound up in his squadron, who has properly prepared himself in a logical and rational manner. Before everything sound principles should be followed, routine will then come of itself. Nothing should be done mechanically, according to pattern, without reflection, reason, or object, but everything should be well-considered.

b. The inspection of a squadron ought not as a rule to last longer than three-quarters of an hour.

c. Nothing should be attempted, or asked of a squadron at an inspection, of the proper execution of which one is not quite certain; when there is *carte blanche* as to the movements, this should be an absolute rule.

d. In the evolutions shown, there should be a gradual increase in the difficulty of the movements and in the rate of pace at which they are executed; one should never begin with the gallop, but from movements at the trot proceed to those at the gallop, and afterwards perform others at the full gallop; thus the demands on the squadron are gradually increased.

e. The squadron-leader should show most, and if possible all, of the regulation movements, so that the inspecting officer may not have to call for any in particular.

f. As a matter of course, there should be no counter-marches, which are pre-eminently opposed to the cavalry spirit, and there should be no going about by threes when in line.

g. The commands "*Halt*" and "*Dress*," especially the latter, should be given as seldom as possible; it is only in the last extremity, when it is required to re-establish order, that dressing will be employed, and then individual men will not be dressed up, &c., but only whole zugs.

h. Repetitions must be avoided; the same movement must not be done twice to the same hand; suitable variations and alternations of movements should be employed to show the good qualities of the squadron.

i. The leader should above all adopt a good free pace, cover plenty of ground, and completely finish one evolution before another is commenced. Movements, therefore, should not follow each other too quickly, there should be no twisting about on the same ground, and one evolution should not be discontinued for another; this only produces slovenly and imperfect movements, and is very hard upon the squadron; only very well trained squadrons can be treated in this manner, but it is quite opposed to the spirit of cavalry.

The leader should manoeuvre so as always to have ground before him, and not keep at one end of it or on the border of the drill ground. For our arm a free field, when it can be obtained, must be taken advantage of to the fullest extent. One movement should not be allowed to succeed another immediately, nor should its completion be interrupted by another, because there is not room to finish it; this should never happen to a leader. He should have a good knowledge of his ground, and calculate beforehand how much room will be required for each evolution; e.g., in diminishing the front to zugs, for which a good deal of room is required in front, he ought not to wheel the head of the column until the rear zug has got its covering in column; this shows want of foresight on the part of the leader, and such movements, running one into the other, are objectionable. The leader must judiciously divide his ground and have plenty of room before him for each evolution, otherwise his squadron cannot move at a free pace, and counter-marches must be made use of, which should never occur;* e.g., a squadron marches up to the end of the ground, and is required to break into single file; there is not the slightest occasion to counter-march so as to get the normal formation to the rear, but zugs can be simply wheeled right or left about so as to invert the squadron, and the advance in single file can then be made. This is simply carrying out the fundamental principle always to *take the shortest road and employ the simplest movements*, without thinking of the formation; this can-

* Written before the Regulations of 1873 were issued.

not be too strictly adhered to, for thus we shall not be taunted with the reproach "*Too late.*"

k. As already remarked, a rational programme must be adopted at an inspection. It is advisable to begin with a forward movement at the trot; a slower pace ought not to be employed. (If the walk is necessary, to breathe the horses, it should only be allowed during a retirement, after a wheel about, for this corresponds with what takes place in real warfare). After that should follow a wheel to either flank by zugs, a change of direction of the column on a movable pivot, wheel into line, and an advance; then a wheel into column to the other hand at the trot, a change of direction (outwards, if it was previously done to the inner hand), wheel into line, and advance; then the squadron should break into column of zugs and form line to the front. After this would follow wheels of the squadron, wheeling into half-column and advancing in half-column, still at the trot; next would come manœuvring at the gallop, including a number of the previous movements, and above all formations of column and re-forming line at the most rapid pace. We should then proceed to the charge, and so consummate the fighting-idea which underlay the previous drill, after which the squadron would manœuvre with reference to one front and one flank. During the attack we must perform real evolutions ("*evolutioniren*"), that is, manœuvre against the enemy's flank. After every charge the *mêlée** and rally to a new front should be shown.

Something of this sort should be the programme for an inspection, where full play is left to the spirit of the leader in arranging the details and order of the evolutions; only he must exercise forethought; he must well calculate his ground, and never be cramped for room.

In a small confined drill-ground the showing up of a squadron will naturally be more difficult than it would be on a plain admitting of extended movements, one corresponding to the spirit of our arm.

It will be advisable, when approaching very near the boundary of the ground in zug-column, to form line to the front in inverted order, and as soon as the last zug is in line, to give the sound "*Front*" [zugs wheeling about], and advance; the leader thus gets the whole length of the ground before him again, and can proceed with other movements. Or a retirement in half-column can be executed, followed by the sound "*Front*," when the squadron will be advancing on a diagonal line.

This is better than an everlasting repetition of changes of direction on a movable pivot, which justly convict the leader of want of ideas. Above all the leader cannot too often make sudden unexpected changes of front and direction, unlooked-for formations of line to a flank, which show the address and

* "*Break up*" of our Regulations.—Tr.

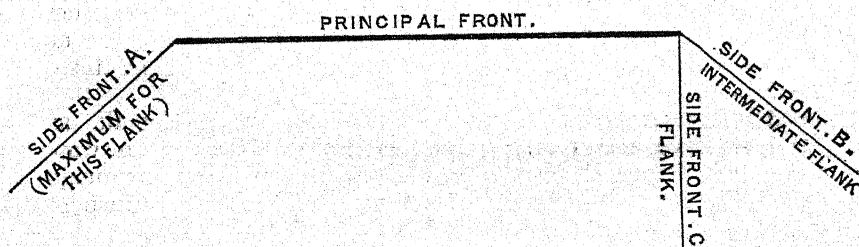
manœuvring power of his squadron in the best light, and are most in keeping with the genius of our arm. Among others, the following evolutions may be selected for forming line to a flank:

- (a.) Advancing in half-column from the left (or right) of an inverted line, followed by the sound "*Front*," when the zugs wheel three-quarters left (or right) about, and form line on an oblique front.
- (b.) Forming inverted line from column, followed by the sound "*Front*."
- (c.) All movements in half-column, formed by the half-wheel, or advancing in that formation from line, in combination with the operation of making the rear bodies cover the head of the half-column.

l. The fence and ditch should, as far as possible, be used as a defile in these evolutions, and the exercises should include passing over them. If the position of the obstacles makes this impracticable, the leaping may be postponed till the end of the inspection; but it must always be shown.

m. The leader, even in the most elementary regulation movements, should consider himself in presence of an enemy, and regulate his movements with that idea; he thus has a sort of scale by which the mobility, dexterity, and manœuvring power of his squadron can be measured. It follows from this that squadron-drill proper (*Eskadronschule*) should only be shown up on the express order of the inspecting officer.

n. One side must be taken as the front, and an adjacent one as a flank, and both will be considered threatened by the enemy; of the other flank only half, at the outside, can be considered threatened. We thus have a principal front and three lateral fronts; of the latter, two (A, B) form an obtuse angle with the principal front, and the third (C) forms a right angle. The leader must always regulate the formation and movements of the squadron with reference to these directions.



o. If when skirmishers (*Flankeure*) are out a flank movement is made, they should not be made to go over a large arc of ground so as to cover the new front, as such a movement is quite unnatural. If such a flank movement, or rather formation of line to a flank be necessary, while skirmishers are

still out to the previous front, fresh skirmishers should be sent out to the new front and the old ones rallied on the 4th zug, which will then rejoin the squadron.

p. When carrying out a particular fighting-idea at an inspection, as if before an enemy (*Gefechtsverhältniss*), it would be contrary to reason for the squadron to stand fast in order to wait for the 4th zug, supposing the latter to have skirmishers out or to have fallen out and pursued the enemy; the squadron, on the contrary, should always advance to meet the zug, and great care should be taken that the latter with its skirmishers clears the front as rapidly as possible, by a sharp oblique movement, so as not to cause disorder in the rest of the squadron. It would be very advantageous if the 4th zug and all detached men, instead of racing wildly in front of the squadron, going over twice the ground they need, and performing many useless evolutions, would, besides taking an oblique direction and clearing the front for the frontal attack, threaten the enemy's flank, and attack him simultaneously with the squadron; this could very easily be done, and it would have a greater effect on the enemy than the mere reinforcing of the main attack by the 4th zug and detached men.

q. The attack should be followed by evolutions, corresponding to what would occur in reality. Either the enemy is repulsed, or the attack has not succeeded. If the enemy is repulsed, he will be pursued by skirmishers, or by the 4th zug, or by the whole squadron after it has rallied on the sound "*Squadron Call*." If the attack has not succeeded, the squadron must immediately retire in a direction perpendicular to the front, and the retreat will be covered either by any detachments that may still be intact, which will take the pursuing enemy in flank, or by skirmishers who will keep up a well-sustained fire on the enemy; or if these intact detachments, reserves or supports, are not at hand, after retiring some distance, skirmishers should be detached to detain the enemy, who will be instructed to keep up a good fire, and to follow the squadron at a suitable distance. But it would be quite unjustifiable, after an attack, to wheel to a flank and change direction, either to the front or rear, or to execute other similar movements which would be diametrically opposed to the reality of fighting, would be utterly unnatural, and give an absolutely false idea of the real thing.

All movements, both after and during the attack, should, as far as possible, correspond with what would really occur in warfare, and should be part of the development of a previously formed fighting-idea. This must be adhered to at an inspection.

When a squadron has been thoroughly trained, it should always be drilled, in accordance with a supposition which each leader will make for himself, picturing in the imagination all the various situations which could occur in actual warfare. The supposition then must not be limited to the possibility of the enemy's attack being only in front, on a flank, or from the right

(or left) front, and that one would have to form only in these directions, but it must extend further, as for instance, the enemy appears in front, is reinforced, makes a flank movement; he threatens the rear, makes a feigned retreat so as to entice us after him and expose ourselves to a flank attack, &c.

In a word, we must propose to ourselves real and possible situations, such as would occur in warfare, and the movements executed should be simple and natural ones, such as would be required in reality to meet the most varied situations. It is indispensable that the leader should imagine himself in all these situations, should picture to himself his own position, and what he would have to do with the squadron in order to meet the case, so that he may be ready for all emergencies, and hold his own.

If squadron-leaders will proceed in this way, the fighting instruction of their squadrons will be greatly improved, to say nothing of their own personal gratification at the results obtained.

Really useful routine can only be arrived at by conscientiously following out rational principles; and it is only by adopting and systematically carrying out such principles that one acquires the ability, involuntarily and as if by instinct, to do the right thing without hesitation or wasting time in reflection. First we want the school, the grounding in the system; then individual working out of the principles, so that they may be assimilated as part of one's flesh and blood; and lastly, they must be applied and put into practice with perfect independence and individuality.

CHAPTER 5.—TACTICAL EXERCISES OF ONE OR MORE SQUADRONS.

The tactical instruction of the squadron divides itself into three periods:—

The first period embraces merely the instructions laid down in the Regulations.

The second is limited to movements having reference to the front and flanks, at the most to three fronts, and in this we approach the working out of a fighting-idea, especially as regards the attack, as has been laid down for the inspection of a squadron.

In the third period a real situation in warfare is supposed, such as would probably occur in reality, in which all the separate movements would be at command; and this is the most instructive for both officers and men.

During the last portion of the spring-drills particular orders should be given to the squadron-leaders on the ground, either to each separately, or to two of them (who will work against each

(I. C.)

G

other) or to more, who will mutually support each other in a definite object and take part in the fight with the squadrons engaged with the enemy.

These then would be the exercises in the third period of instruction.

1. As to the duties of the squadron-leader in the first case, where there is a supposed enemy, even if the exercise be of the very simplest nature, a distinct idea must be borne in mind so as to simulate what would occur in reality. The enemy only can be imaginary, the ground should never be supposed; it must always be taken as it is in reality.

2. In the second case, where two squadrons work against each other, one should proceed somewhat as follows:—

Two squadrons would be placed as far as possible apart in two opposite corners of the ground, on a diagonal, either in line on the ground itself, or in column of route on the roads leading to the ground. From these points the squadrons, without surrendering their lines of retreat, which lie directly to the rear of their positions, should march on and manœuvre against each other, so as to gain each other's flanks and charge them. Each leader should endeavour to force his opponent to make certain manœuvres, and not allow the adversary to compel him to make them.

It must be a fixed principle that the line should not be broken into column after arriving within 500 paces of the opponent.

It will rarely happen that the two lines will come so exactly opposite each other in the attack, that their flanks will be opposite each to each; in most cases there will be some overlapping on one flank, and then it will be the duty of every zug-leader, when he foresees that this will be the case, to take the initiative on his own account, and so lead his zug that it does not charge in the air, but falls on the flank and rear of the adversary, for *10 men on the flank do more than 100 in front.*

3. When separate orders are given to several (generally two) squadrons, but tending to the same end, the squadrons having to give each other mutual assistance against one or two other squadrons, the principles mentioned in paragraph 2 will generally be applicable. In this case one squadron would follow the other as second line at a distance of 250 to 300 paces, either out-flanking or directly in rear of the first line, but not nearer than the above distance, so as not to be involuntarily drawn into the fight of the first line. So long as the first line is not yet engaged, the second follows its movements; when the former is actually engaged, the second line supports it either by detaching to it a portion of its men so as to decide the victory by falling on the flank and rear of the adversary, or by holding itself in readiness to cover the retreat of the first line, and attacking the opponent in flank while he is pursuing it. But the whole of the second line must never be thrown into the fight of the first line if there is no third line, otherwise it would fail in its object, which is to support the first line.

There should be frequent combats of this sort, of several squadrons against each other; and squadron-leaders should picture to themselves that every movement of the squadron should represent an idea, an intention of the leader; an idea either just or false, decided or vague, which latter would show that the leader does not exactly know what to do. This is the worst fault in a cavalry officer; it is better to stand fast than to rush about here and there, to advance and retire again, and generally execute undecided and confused movements.

I would further recommend that on the occasion of these tactical exercises, rapid deployment on issuing from a defile should very frequently be practised; this should be a second nature for the cavalry soldier, and the routes to the drill ground offer the best opportunities for practising it. Each zug must immediately front form without any delay, as soon as the width of ground permits it, and each squadron will similarly form line. This should be practised daily, and with the greatest rapidity, so that the most perfect order may be combined with the greatest speed. Good order and rapidity are of equal importance in our arm; if either must give way to the other, then rapidity must yield, so as to retain perfect order, which is indispensable; but it is always desirable to have the greatest rapidity with the most perfect order. The surest way of arriving at this is always to *take the simplest formation and the shortest route*. These formations are such as allow the squadraon, in whatever order or situation it may be, to pass most rapidly from column to line and *vice versa*. The routes are those which lead direct, without any *détour*, to the point to be reached, which take therefore diagonal and not rectangular directions. That squadron is the best trained which moves in this manner.

PART III.—THE REGIMENT.

CHAPTER I.—INTRODUCTORY REMARKS.

In order to be properly prepared for regimental movements, so that but little may have to be done in this respect, and that a certain degree of facility in manœuvring several squadrons under one commander, and in leading them as component parts of the regiment may be acquired before the commencement of regimental drill; in order, too, to be able to spare the horses later on, and to be well prepared to take part in the autumn manœuvres, I would strongly recommend that, whenever it is possible, all the squadrons stationed in the same garrison should, from the month of July, be exercised as a regiment at least once a week.

It will thus be possible to make the squadron-leaders familiar with their duties in regimental movements before the drills commence, which is of the greatest importance. Regimental movements proper will then develop to the highest degree the skill of the leaders, accustom them to comprehend quickly, and to make rapid resolutions in the face of exceptional circumstances, such as are not provided for by the Regulations; the mobility, manœuvring power, and rapidity of movement of their squadrons will also be developed to the highest degree.

For this it is necessary to drill and manœuvre without any fixed scheme, so that none of the leaders may know what is going to be done. The same plan should be adopted at the inspections of regiments, no intimation of what is going to be done being made either verbally, or in writing, or by the frequent repetition of the same movements. No one should know what is coming; all must be new to every one.

All orders should be given impromptu on the ground, without any previous arrangement, and should be given by word of mouth or trumpet sound. If any mistake occurs through misunderstanding or wrongly interpreting a command or sound, this will be of no consequence, and it is at any rate far better than mechanically repeating a fixed programme. The rapid and adroit correction of a mistake says much for the suppleness and manœuvring power of a squadron, and for the intelligence and quickness of resolve of its leader.

CHAPTER 2.—ESSENTIAL PRINCIPLES AND FUNDAMENTAL CONDITIONS FOR REGIMENTAL MANŒUVRES.

a. I take it as an essential principle that *the squadron must be considered as the independent tactical unit*, and that there should not be a too rigid observation of the intervals between squadrons. The regiment has not to march with its five squadrons like a squadron with its four zugs; squadrons are in themselves complete units. This is a fundamental principle that cannot be sufficiently attended to. The more independence and cohesion the squadrons have among themselves when working in regiment, with so much the more certainty, calm, and order will the regiment as a whole perform its movements, especially the main movements in line; there would be no hesitation and wavering of the squadrons, no avoiding or crowding on to each other, but each independently would march forward with certainty, and any new direction would be taken up with rapidity and precision.

For this it is necessary that the squadron should always be led strictly by its leader, and that the flank-guides should under no circumstances on their own account hang, or give way, to another squadron in order to preserve the proper interval, as this loosens the cohesion of squadrons; on the contrary, without troubling themselves about the size of the intervals, they must simply attend to their *pace* and *direction*, and regulate these in accordance with their zug-leaders.

The squadron-leader, when working in regiment, does well to think that he ought to keep near the next squadron, so as to preserve the cohesion of the whole, but this should not degenerate into over-anxiety about preserving the regulation intervals. If each squadron correctly marches in the general direction, there will be no necessity for any inclining; it is therefore of most importance to be able to take a new direction quickly and with precision. Only by the strict observance of these principles can cavalry in large masses work on broken ground with anything like order.

Even at the halt it is contrary to the cavalry spirit to correct too large intervals by the flank march of threes, or by inclining; it is much better done by command of the squadron-leader while advancing or retreating.

Of course, in formation for parade the squadron intervals should not exceed six paces.

b. In the next place I would insist on the independent riding of the rear rank, and its keeping the proper distance from the front rank, two good paces at the gallop, or for lancers, with lances at the "engage," three paces. This must be strongly insisted upon, and the squadron serjeant-major should be held personally responsible for this. If this be lost sight of, all calm,

order, and certainty in advances in line will be lost; and yet there is often much to be desired with regard to this fundamental principle.

c. I would further, as an essential principle, insist upon the squadrons, in all movements by oblique directions, taking always *the shortest route*, making use of *the simplest evolutions*, so as to reach the desired place in the most direct manner, without any consideration as to the formation the regiment will be in, whether inverted or normal; the last consideration is of no weight whatever, but the preservation of perfect order is essential. Rapidity must be developed to the highest extent compatible with order. By attending to these principles only shall we avoid the reproach "*Too late*," the most disgraceful of all for cavalry.

To this end the squadrons, when any formation is ordered, should avoid all useless movements; there should be no advancing and retiring again, or moving from side to side, which is quite contrary to the cavalry spirit, but the simplest movements should be selected so as to take up the position and formation required in the quickest possible manner.

For example: if squadrons are to take up an alignment to the rear they should not pass the line and have afterwards to move up, but after wheeling about should not require to advance, and should merely receive the command "*Halt*," "*Dress*." Such liberties could not be allowed, being contrary to the cavalry spirit and useless, causing waste of time, and proving want of precision and exactitude. Again, at the end of the drill, if a certain position should be indicated for marching past, &c., it must be taken up as rapidly as possible. Nothing makes a more unfavourable impression than to see cavalry in such cases twisting about and unable to get into the desired position at once.

Each leader should be able to take in the situation at a glance, and should then without reflection resolve what he will do, and immediately do it. We cannot too strongly impress these principles upon our leaders, for mobility and rapidity are our vital element, through which alone we are able to accomplish anything.

To recapitulate the three preceding points:—

1. The squadron must be considered the tactical unit in order to maintain cohesion and order in the most important of all movements, the advance in line.
2. The rear rank must preserve its proper distance from the front rank, and strictly conform with it during the charge.
3. All useless movements and want of precision in evolutions must be scrupulously avoided, our motto being "the shortest route and the simplest movement."
- d. Nothing is more necessary than to preserve most rigorously in all drills *uniform pace* and *steady direction*; these are the

foundations of order and security. One should not weary of repeating this again and again.

If any minor irregularities occur they will never produce very important results, and will not propagate their effects in other squadrons, and so take larger dimensions, provided uniformity of pace is maintained.

In order to ensure the correct direction being taken, the officer commanding the regiment should always, in all advances and retirements, indicate in a loud voice the objects on which the regiment is to move; and, when in line of squadron columns, he should indicate which squadron is to direct. This should not be neglected, as these aids save many words of command and prevent much disorder.

Again, it is highly improper for the leader of a flank squadron which is to give an alignment for the other squadrons at the halt to advance the leader of the second zug from the directing-flank, which would cause the whole regiment to wheel up a flank; this violates the important principle of maintaining the direction and destroys the cohesion of the regiment, as in this way squadrons get too large intervals and separate through inclining to the right or left. If the squadron-leader wishes to facilitate the formation, he should advance the two zug-leaders nearest the flank.

e. Inversion should rather be the rule than the exception, since on the signal "*Front*" from column one would always wheel into line to the hand nearest the enemy, in ordinary drill or peace manœuvres to the hand where the squadron-leaders are, without any regard to the normal formation. The squadrons will thus not only be more supple, but it will preclude all misunderstandings and mistakes. The sound "*Front*" no longer means to form in the normal order.

f. It is desirable that the squadrons when formed in regiment should always, as far as possible, march off from the same flank.

If ever from any cause a squadron should be formed differently from the others, which can easily arise from being detached, the leader should at once observe it, and in one of the next evolutions of the regiment should recover his proper formation in the simplest manner and without being observed. A collision between squadrons on forming line from squadron columns can never occur owing to some squadrons having marched off from the right and others from the left, as line is always formed to the front on the left without regard to squadrons being right or left in front. * * * *

g. It should be a fixed rule that, in forming line, squadrons should be formed first and from these the regiment, so that a front may be formed as rapidly as possible, though it be but in echelons.

h. The action of the senior and junior officers on their squadrons, whether in carrying out new movements, changing direction, &c., correcting mistakes so as to prevent their going any further, or altering an incorrect direction, should be as rapid as

possible; they cannot be too energetic or make their influence felt too much.

i. When the officer commanding the regiment has only short orders to give, it works much better not to call all the squadron-leaders together, but the orders should be given loudly in front of the regiment; this is much quicker.

k. In order to avoid mistakes and to abbreviate as far as possible the instructions and words of command, so necessary for action, it is indispensable to adopt a fixed terminology, or technical terms, for the most frequent formations, &c.

The most important of these technical terms are as follows:—

- a. *Flank protection*: towards the outward flank, to repel the enemy attacking us from that direction.
- b. *Flank attack*: to the inward flank, to surround the enemy attacking us from the front.
- c. *Right Flank* and *Left Flank*: always mean *our* right or left flank, not the enemy's.
- d. *Squadron columns*: squadrons in zug column, parallel to each other, at full intervals [*i.e.*, line of squadron zug columns.—Tr.]. Fig. 26. Pl. III.*
- e. *Close Squadron column*:† squadrons in zug column, parallel to each other, at six paces interval [being formed either by closing squadron columns in to one another, or by wheeling zugs to a flank from a close regimental column.—Tr.]. Fig. 32. Pl. III.
- f. *Zug column*: the whole regiment in one column of zugs. Fig. 35. Pl. IV.
- g. *Regimental column*: squadrons in column—
 1. Open, at wheeling distance [open column of squadrons.—Tr.].
 2. Close, being the last closed up to zug distance [*i.e.*, a distance equal to zug frontage *plus* six paces.—Tr.]. Fig. 34. Pl. IV.

The Squadron columns (d) and Close Squadron column (e) will be principally employed, and not the Regimental column (g); but we must picture to ourselves that the close squadron column is a close Regimental column [g. 2] wheeled by zugs to a flank.

It is indispensable that these technical terms, short and precise, should be used by all, so that the subordinates, especially trumpeters, should be thoroughly acquainted with them, and mistakes avoided. For example, there are the zug column and squadron columns, but if we say "squadron zug column," we introduce a misunderstanding; the term zug must be left out. Many mistakes result from this, and we cannot be too precise in the terms we use.

* The figures, which will be found at the end, are numbered so as to correspond with those given in the German Cavalry Regulations.—Tr.

† *Zusammengezogene Kolonne*. This is called Regimental Column to the Front (*Regiments Kolonne nach der Front*) in the German Regulations, and generally "Regimental Column" simply.—Tr.

m. Verbal words of command should be avoided as much as possible whenever the movement can be performed by trumpet sound. In the interests of rapidity of execution and clearness of meaning, leaders should make the most extended use of the regulation sounds.

n. Trumpeters when sounding should turn the bells of their trumpets towards the squadrons to which they are sounding and not away from them; and if the sound is not understood, they must on their own account at once repeat it. This sound must be at once taken up by the squadron-leaders' trumpeters. The trumpeters on the flanks of squadrons do not repeat the sounds regulating movements, so as to avoid the delay in the movements which would result.

A squadron sound will be repeated only by the trumpeter of the squadron in question.

o. The sound "*Aufrücken*" (close) will be used to close squadron columns to close squadron column, as this formation is of very frequent occurrence in the tactics of the present day. A sound for this movement being desirable, we thus avoid introducing a new one, and misunderstanding on account of the double meaning of the sound cannot occur.

The same sound can be employed to form close squadron column from (regimental) zug column.

p. When movements are made to a flank or to the rear from close squadron column, and the sound "*Front*" is given, the zugs will wheel into close squadron column towards the enemy or towards the leader who sounded, as in squadron columns.

q. If squadrons have wheeled from line, the open column of squadrons so formed should not, on the sound "*Front*," wheel into line again, but they should take the fundamental formation, that of squadron columns towards the enemy or towards the leader who sounded, without considering whether the open regimental column had been formed by wheeling from line by whole squadrons or not.

r. If a formation of line at the trot or gallop should be interrupted by the sound "*Front*" before the last zug is in line, or before all the zugs have changed direction on a movable pivot (it being necessary to form the line rapidly to the new front), then, in order to prevent the possibility of any misunderstanding and to conform with the rule that at this signal line is to be formed towards the leader who gives it, or towards the enemy, the sound "*Front*" should be given in front of that part of the regiment which has already got the new direction, so that the rest of the regiment which has not yet changed direction may be warned in which direction line is to be formed.

s. The pursuit of the defeated enemy by the flank squadrons after the charge, on the sound "*Fanfaro*," is now directed in the Regulations.* The pursuing squadrons have not to cover the

* In Chapter V of the new edition of the Cavalry Regulations (4th June, 1874).

whole front of the regiment, but move straight to their front in dispersed order.

t. I especially recommend executing numerous movements on the diagonal, on oblique lines, working by the commanding officer's trumpet, movements in two lines, in single rank and in half-columns, which cannot be done too thoroughly or precisely. All this takes up the whole of the time at one's disposal if we would attain absolute certainty in the movements; all, therefore, that is superfluous and unnecessary must be omitted, such as forming line* from the halt, taking full intervals, or closing in from the halt, wheel of the regiment on a flank squadron, wheeling into line by zugs or squadrons, and skirmishing.

On the other hand there must be frequent practice of the *mêlée* after the charge, such as would take place in reality, the men breaking up into the most complete disorder, so as to accustom them to rallying with the utmost rapidity in any direction, to the front or flank, but always on their leaders; this is of the very highest importance. The rally of the regiment after the *mêlée* or swarm-attack is best made on the "*Regimental Call*," in the direction in which the commanding officer rides and towards which he points with his sword; and that this place may be plainly seen, it is advisable that the standard and two non-commissioned officers should be placed there, forming behind the commanding officer. The squadron-leaders should then have their squadron calls sounded so as to point out to their men more precisely where they are to form.

If the charge was made in inverted order the squadrons must rally in that order; this should be a fixed rule.

CHAPTER 3.—DIRECTIONS FOR THE EXECUTION OF THE MOST IMPORTANT MOVEMENTS.

a. MOVEMENTS IN LINE.

These are regulated by the following principles:—Care must be taken that each squadron marches straight forward independently, as if it had no connection with the rest of the regiment; that the right or left flank-guides are strictly enjoined to ride straight on the points of direction indicated by the squadron-leaders, and not to deviate from them because the squadron intervals happen to be greater or less than they should be, or have even disappeared altogether; these intervals are simply for this purpose, that the unavoidable fluctuations of squadrons shall not affect neighbouring squadrons. The five squadrons do

* *Deployiren.* The word "deploy" is avoided in this translation, as it is at present restricted in our service to forming line to the front from Quarter Column.
—Tt.

not march close to each other like the four zugs of a squadron, but are independent tactical units. If an interval is continually increasing or a squadron so crowds on the next squadron away from the directing point that the interval disappears, the leader of the latter must incline so as to accommodate his squadron, but should be careful not to do so too soon, as after such a fluctuation there generally follows a reaction in the opposite direction, and the fault will have extended to the other squadron, which the interval is intended to obviate.

But these are only exceptional occurrences, such as would not take place with well drilled squadrons that are accustomed to marching straight forward, and do not involuntarily deviate to the right in an advance in line nor to the left during a retirement in inverted order. Such changes of direction are best prevented by taking the direction of the regiment in all movements in line from the centre,* *i.e.*, the third squadron from the right, as in the attack; all faults that may arise will thus be diminished by half, as the front is only half as long.

The necessity of marching perfectly parallel is far greater in the advance of a line than in that of a single squadron if we would execute this most important of all cavalry movements (on which entirely depends the attack, the vital element of our arm) with calm, good order, perfect security, and at the most rapid pace. The longer the line the more difficult the movement, and it is only by strictly carrying out the principles indicated that it can be done effectively. For this it is before everything necessary that each squadron should march independently and with certainty, and that these principles should be departed from only when absolutely necessary for the good order of the whole.

It is better that the intervals should be too great than that the squadrons should lose their cohesion and steadiness and fall into disorder.

If the squadrons march at an irregular pace the commanding officer of the regiment can easily make them resume a uniform rate.

Just as the fluctuations of one squadron, right or left, should not influence the neighbouring squadrons, so equally should they not be affected by its advancing or hanging back too much; they should march straight forward, maintaining their own uniform pace. Thus the flanks of the regiment will continue to march at a perfectly even rate, there will be no involuntary bringing up of a flank, and the regiment after advancing a thousand paces will be quite parallel to its original alignment.

As before stated, movements in line are the vital elements of our arm; on them depends all our influence on the enemy, and therefore we must devote the greatest care and attention to the practice of them, especially at the gallop.

The great aim should be to attain the greatest rapidity combined with the greatest calm and order, and no squadron should

* This is now laid down in the Regulations of 1873.

rush to the front when at full gallop, or give rise to any apprehension that it will get out of hand of its leaders, nor should it, without command or trumpet sound being given, commence to charge against its leader's will.

b. MOVEMENTS IN COLUMN.

aa. *In Squadron Columns.*

Squadron columns* present great advantages; they ensure the leader's having his squadron in hand under all circumstances, and they allow of perfect order being maintained, which latter is more imperilled in line where disorder in one squadron more easily spreads to the others.

This formation, too, lends itself very readily to all conformations of ground; one can easily avail oneself of all practicable ground, and such as is impracticable can be avoided by slight détours; the squadrons close in to one another, and after passing the obstacle resume their proper intervals; there is always room enough for this. The losses from fire are not so great as when in line, so that it is advisable to remain as long as possible in squadron columns when advancing to the attack. Changes of front are much more easily executed in this formation than in line. And, lastly, it leaves room for any repulsed squadrons to pass through, although this is not advisable as a rule, since the enemy may thus be admitted into the intervals with those who are repulsed.

bb. *In Close Squadron Column.*

This formation, on account of its compactness, is especially adapted for manœuvring, as it is only necessary to direct the head of the column judiciously.

Movements in close squadron column are of great importance, both because they are so much used on service, and because the formation provides the chief means of equalising the pace of squadrons, of making them supple and mobile, and of accustoming them to move on the drill ground with steadiness and precision in the eight directions, the four perpendicular and four oblique lines, on which so much depends.

The trotting by zugs on an alignment, and changing direction on the movable pivot, are certainly a means to these ends, but they should come afterwards, being more difficult to execute than movements in close squadron column, which should be looked upon as a close regimental column wheeled by zugs to a flank. In zug column the regiment is drawn out to too great a length, and variations in pace easily result from it if the above-mentioned means for preventing them have not been adopted; and similarly of variations in direction, which in forming line at the trot and gallop have such a prejudicial influence on the resulting line.

* *i.e.*, Line of squadron columns. See p. 96, d.

cc. In Zug Column.

This is of especial use for flank movements which are intimately connected with changes of front, and thus for the second line, for example, when it is formed in squadron columns; after passing from the last formation to zug column the commander gives the proper direction to the leading zug, or wheels it on a movable pivot, the alignment trot or gallop follows, after which the column wheels into line and advances to the attack.

It will thus often happen and cannot be avoided, that the line will be formed in inverted order, and must attack in that formation, which should be frequently practised; for example, the squadrons in squadron columns are right in front, and it is required to threaten the enemy's right flank, for which a flank march to the left is necessary; heads of squadrons, therefore, wheel to the left, which brings all the 1st zugs of squadrons leading, and on wheeling into line all the 4th zugs will be on the right flanks of their squadrons. The same thing happens if the squadron columns are left in front and the left flank of the enemy has to be gained.

As the zug column is very flexible, and it is easy to give any desired direction to the head of it, it will be very frequently used on service for rapidly making a flank march.

dd. In Half-column.

These half-column movements by zugs or squadrons are most important means for gaining ground to the front and flank, and reaching the enemy's flank; I would therefore call the most particular attention to them. They must be executed with the greatest precision.

c. FORMATION OF THE MOST IMPORTANT COLUMNS, AND PASSAGE FROM ONE COLUMN TO ANOTHER.

aa. Formation of Squadron Columns.

1. From Close Squadron Column. Fig. 32. Pl. III.

If squadron columns are to be formed on the move from a close regimental column* which has wheeled by zugs to a flank, or (which is in effect the same thing) from close squadron column, the Regimental Commander gives the caution, or sounds "*Form squadron columns*," when the squadron-leaders give the necessary commands. [Cav. Regs., Fig. 52.]†

The squadron of direction (the 3rd, if no other is indicated) advances at the trot until the next squadron on each flank has obtained its proper interval from it (by inclining) and received

* See p. 96, g. 2.

† References to those Figures in the German Cavalry Regulations which are not shown in the Plates at the end are included in parenthesis.

"*Forward*," on which the leader of the former gives the word "*Walk*". The other squadrons incline at the trot until they get their proper intervals, and are brought into the alignment by the word "*Forward*." If squadron columns are to be formed on a flank squadron (which must be named), its leader will give the word "*Walk*" as soon as the next squadron comes into line by the word "*Forward*."

At the halt the formation is made in a similar manner, but by the outward wheel of zugs [Cav. Regs., Fig. 53]. The squadron of direction, or named squadron, advances at the trot, by its leader's word of command, for a distance equal to a zug's frontage *plus* four paces, and receives the word "*Halt*." The other squadrons wheel by zugs outwards, and when they have got their intervals receive "*Front*," when they wheel to the front and receive "*Halt*."

2. From Zug Column. Fig. 59. Pl. V.

If squadron columns are to be formed from zug column, the regimental commander gives the caution, or sounds "*Form squadron columns*."

The leading squadron-leader gives "*Forward*," and continues the pace (or if done from the halt advances at the trot) for a distance equal to a squadron's frontage, and gives the word "*Walk*" (or "*Halt*"). The other squadron-leaders give "*Head,* Half-left* (or *right*)," conduct their squadrons to their places in the line, and when their leading zug has got its proper interval, give "*Head, Half-right* (or *left*)," followed by "*Squadron—Walk* (or *Halt*)."

3. From Half-column. Fig. 67. Pl. VI.

On the caution, each squadron forms column (by the rear zugs covering the leading zug) while advancing, the leading zugs maintaining their direction. The flank squadron advances a squadron's frontage and halts, or takes the next slower pace; the other squadrons enter the alignment in succession, taking their proper intervals by inclining.

4. From Column of Route (Threes).

On the caution or sound "*Form squadron columns*," each squadron first forms zug column (by squadron-leader's word), and then takes its place in line.

bb. Formation of Close Squadron Column.

1. From Squadron Columns. [Cav. Regs., Figs. 41, 42.]

To close together squadron columns, whether in movement or at the halt, the regimental commander gives "*Regiment—*"

* Or "*Leading Zug*." The German term, simply "*Die Tete*" is very concise and practical, and will hereafter be translated "*Head*" only.—*Tr.*

Close," or he uses the sound "*Close*," or gives "*Close on the—Squadron*," when squadrons move in a similar manner to what is laid down for taking full interval (*aa*, 1). At the halt the close is effected by the wheel of zugs, on the move by the incline.

2. From Zug Column. Fig. 65. Pl. VI.

To pass from zug column to close squadron column, the Regimental Commander gives the caution, "*Heads of squadrons, Close to the front*,"* or the sound "*Close*," rear zugs inclining.

3. From Column of Route.

The formation is effected in the same way as for squadron columns, by the caution, "*Heads of squadrons, Close to the front*,"* or the sound "*Close*."

cc. Formation of Zug Column.

1. From Squadron Columns. Fig. 46, 47. Pl. IV.

a. If zug column is to be formed from squadron columns without first wheeling zugs to a flank [which would form open regimental column], the Regimental Commander gives "*Regiment, Heads of squadrons right (left) wheel*," or, if a flank squadron is to march to the front, "*Regiment, the — squadron forward, Heads of squadrons left (or right) wheel*." Squadron-leaders give their cautions, and zug-leaders their executive words of command.

b. In order to avoid describing a right angle, and to take an oblique direction towards the inner flank so as to gain an enemy's flank, the following mode of proceeding is better:—

The Commanding Officer gives, "*Heads of squadrons half-right (or left)*," on which the squadron-leaders give the necessary cautions. This is followed by the regimental "executive sound," so as to ensure the precision necessary for this movement, and that the squadron-leaders may simultaneously give the executive commands for the wheel of their leading zugs on a movable pivot.

The sound "*Form zug column*" is given as soon as each squadron has changed direction, or has nearly done so. The leading squadron, that on the flank towards which the change of direction of the heads of squadrons was made, continues in the new direction, while the others cover by changing direction on a movable pivot. Fig. 48. Pl. IV.

Or it can be executed thus: the sound "*Zugs half-right (or left)*" is given, to bring each squadron into half-column, then the "*Executive sound*" and "*Form zug column*," when the squad-

* The Regulation word is "*Form Regimental Column on the Right (or Left, or on both Flanks)*," i.e., "*Form Close Column (of von Schmidt) on the Right, &c.*"
—Tr.

ron-leaders give the necessary commands. Each squadron forms squadron column in rear of its leading zug (rear zugs inclining to cover), and get into zug column as in the last movement. Fig. 49. Pl. IV.

2. From Close Squadron Column.

If zug column is to be formed from close squadron column [formed by closing in squadron columns or wheeling by zugs to a flank from close regimental column], the Regimental Commander gives, "*Regiment—Advance in zug column from the right (or left)—March (or Trot or Gallop—March).*" The leader of the squadron on the named flank gives "*Forward,*" and repeats the executive word of the Commanding Officer if done from the halt. The other squadrons receive (if necessary "*Halt,*" then) "*Right (or Left) Incline—Trot (Gallop—March).*" Fig. 56. Pl. V.

3. From Half-column, formed by wheeling Zugs Half-Right or Left from Line.

Zug column in the direction of the leading zug is formed on the sound "*Form Zug Column;*" the rear zugs of squadrons cover in column [producing the formation shown in Fig. 48]. The squadron on the directing flank marches in the direction of its leading zug; the other squadrons cover while moving on, making their change of direction as oblique as possible, so as not to go over unnecessary ground.

d. DEPLOYMENT.*

Bearing in mind that it is never requisite to form line in the normal formation, but only to form in the required direction in the most rapid manner and on the widest front, without any concern as to whether the zugs are thus inverted; bearing in mind that deployment is indispensable, as it supplies the means of forming line from close regimental column and from the now more common close squadron column, which may be looked upon as merely a close regimental column wheeled by zugs to a flank; bearing in mind that deployment on the move from close squadron column, if the leading zugs which form the head of it have had the right direction given to them, is a very simple movement, one that is very effective for surprising the enemy, and in working in lines (*Treffentaktik*) can, if used intelligently and judiciously, produce important results; bearing in mind too that in accordance with the royal sanction† wheeling into line towards the enemy is allowed (in peace exercises towards the

* There being no quarter column in the German Service (the nearest approach to it being what General von Schmidt terms close Regimental Column), the term "deployment" generally means merely formation of line from column; but in this Section it is used to denote the formation of line to a flank from close squadron column.—Tr.

† § 64-7, Chap. 5, Car. Regs., 4th June, 1874.

leader) on the sound "*Front*," without any reference to the normal formation or inversion, and that this principle is to be applied in analogous manner to deployments, so as to avail ourselves to the utmost of rapidity in formation and of the mobility and manœuvring powers of squadrons; from all this it follows that—

"If the sound "*Deploy*" is given to a close squadron column (or a close regimental column that has wheeled zugs to a flank) while on the move, the squadron which is nearest to the Commander will wheel into line towards him, without any regard as to whether it will be in the normal formation or inverted; the remaining squadrons march straight on until they have room to wheel, so as to come into alignment with the squadron that first wheeled, or to follow it to the attack in echelon."* Figs. 83, 84. Pl. VIII.

As a matter of course the squadrons wheel into line in succession in the order which they hold from the leader who gave the signal to deploy, so that that squadron wheels into line last which was furthest from him in the column. * * *

In deploying, it is important that the squadrons which move out to the flank should not hang towards the front that is being formed to, but should march out square to the flank and parallel with the front. Leading zugs of squadrons must march square to the flank until the squadron wheels into line, and if these zugs do not then wheel the correct degree, or if they hang towards the front, the squadrons will not be aligned with the outer flank when it comes into line and the deployment will not be true.

c. WHEELING.†

aa. In General.

It is not advisable to execute a wheel of the regiment in squadron columns or line, especially the latter. For a rapid change of direction in presence of the enemy it is far better, instead of wheeling the regiment, to wheel the heads of squadrons in the required direction, or to wheel from line into half-column and front form squadrons, attacking in echelon, or, if time permit, form regiment in line; but squadrons must always be formed first. Fig. 87. Pl. VIII.

bb. Principles for Wheeling the Regiment when in Squadron Columns.

Just as for the wheel of the regiment in line, so must squadrons, in the wheel of squadron columns, take the shortest route. They must not describe large arcs, which would make the movement trailing; it is necessary, therefore, that between

* This corresponds with our "deployment" while taking ground to a flank by fours.—Tr.

† The change of direction of the zug column on a movable pivot has already been fully explained. Chap. 2, 2 and 4 c.

(I. C.)

the two changes of direction that squadrons have to execute in changing the front to the quarter circle on the move, Figs. 71, Pl. VII, 59, Pl. V, they should march straight for only a short distance, and that the wheels should follow each other closely, so that the change may be made without going over much ground. Similarly in a wheel to the rear, after which, if no order be given to the contrary, the squadron columns will again be fronted, the squadrons which follow the pivot squadron must not go far beyond the alignment, but only a little way, when the wheel to the front will follow and the squadrons halt. If it is not wished to front the pivot squadron, a special order to that effect must be given.

cc. Wheels of Columns.

Wheels of the close regimental column to front and rear, and of the same column when wheeled by zugs to a flank (*i.e.*, close squadron column) are frequently done badly, because the inward (pivot) flank does not advance sufficiently in describing its arc to give room to the next squadrons (or zugs), which therefore have to incline excessively outwards. Moreover the outer (wheeling) flanks increase their pace during the wheel, thus infringing a fundamental principle of wheeling, that the wheeling flank must always keep the original pace.

The essential principles for the wheel of columns are these:—

The pivot flank-guide of the leading squadron (or leading zug of the inward squadron), without glancing inwards towards his rank, but looking straight before him, describes his arc in a forward direction at a free walk, taking care not to incline to the left (towards his squadron or zug) during a wheel to the right, and *vice versa*; the correct execution of the whole movement will mainly depend upon him. The inward flanks of rear squadrons (or zugs) march straight on the preceding squadron (or zug) by inclining. The outward flank-guides must exactly preserve the original pace during the wheel. By strictly observing these directions, wheels of columns will be performed in an orderly manner; the regiment will thus take the form of a fan, the pivot flanks being close to each other, and the outward flanks keeping their original distance of one zug's frontage *plus* six paces, or zug distance if in close squadron column. The pivot flanks will naturally resume this distance as each squadron (or zug) completes its wheel.

It rests with the regimental commander to give the word "*Forward*" to stop the wheel, as he alone can judge when it should be given.

f. CHANGES OF DIRECTION DURING MOVEMENTS IN LINE AND WHEN IN SQUADRON COLUMNS.

In these changes absolute certainty should be attained.

Slight changes of direction, in line or squadron columns, should not be effected by the wheel of the regiment, so difficult

to perform, but by means of changing the direction of the squadron of direction (which would better be termed squadron of "feeling"), to which the commanding officer points out the new object of direction (a tower, house, or tree, &c.), in a voice loud enough for all the other squadron-leaders to hear. The other squadrons must take the new direction at once, those on the outward flank of the squadron of direction increasing their pace (*e.g.*, passing from the trot to the gallop), those on the inward flank diminishing it, and all getting their intervals as smartly and quickly as they can.

More extensive changes of direction will be performed by wheeling zugs into half-column, or wheeling the heads of squadrons half-right or left, when, on the signal to form line, *squadrons will first be formed and then regiment*, if there is time for it.

If there is danger in delay, we can charge by echelon of squadrons as they are formed. For this, squadrons must be accustomed to take the direction of the leading squadron of the echelon, as it may be compelled by the position of the enemy to change its direction somewhat.

In this case it is not necessary to sound "*Form squadrons*" and then "*Form regiment*;" the latter signal is sufficient, as it means once for all "*First form squadron and then form regiment*."

When from squadron columns heads of squadrons are wheeled, squadron-leaders must not give the executive word until the regimental "*executive sound*" has been given, which must be done as soon as the squadron-leaders have ordered the wheel of their leading zugs. Experience has shown that this is the only way of procuring precision in the formation.

There should be no drill without these two movements, slight and extensive changes of direction. All these modes of changing the front should be frequently practised, so as to make it a mere matter of routine, as in the field they will have to be employed on one's own initiative, to outflank and surround the enemy, or because an adroit adversary makes such movements on our part necessary.

Working in echelon with squadrons in good order and well-cohering presents no inconvenience in practice. On the other hand, the vacillations and colliding of squadrons, when in regiment entire, curb the impetuosity of the attack and often break up the line just before the shock; this always happens when the squadron is not firmly kept together as a compact tactical unit.

g. RAPID FORMATIONS OF LINE FROM LINE AND FROM THE MOST IMPORTANT COLUMN FORMATIONS, SO AS TO PRODUCE THE GREATEST EFFECT IN THE SHORTEST SPACE OF TIME.

The tactical formations, which will hereafter be employed in working in lines (*Treffentaktik*), may be reduced to these:—

(I. C.)

H 2

- aa. Close squadron column, which, on account of its compactness, is most adapted for manœuvring.
- bb. Squadron columns, preliminary to the attack.
- cc. Line, for the actual attack.
- dd. Zug column, the most useful and simplest formation for flank movements and changes of direction in presence of the enemy, as line is so quickly formed from it.
- ee. Half-column of zugs and of squadrons, for oblique movements to gain the flank of an opponent.

We must now see how we can pass in the smartest, simplest, and shortest manner from each of these formations to the others, how we can form line, and change direction to either flank or half-right or left.

From Close Squadron Column.

To form Line.

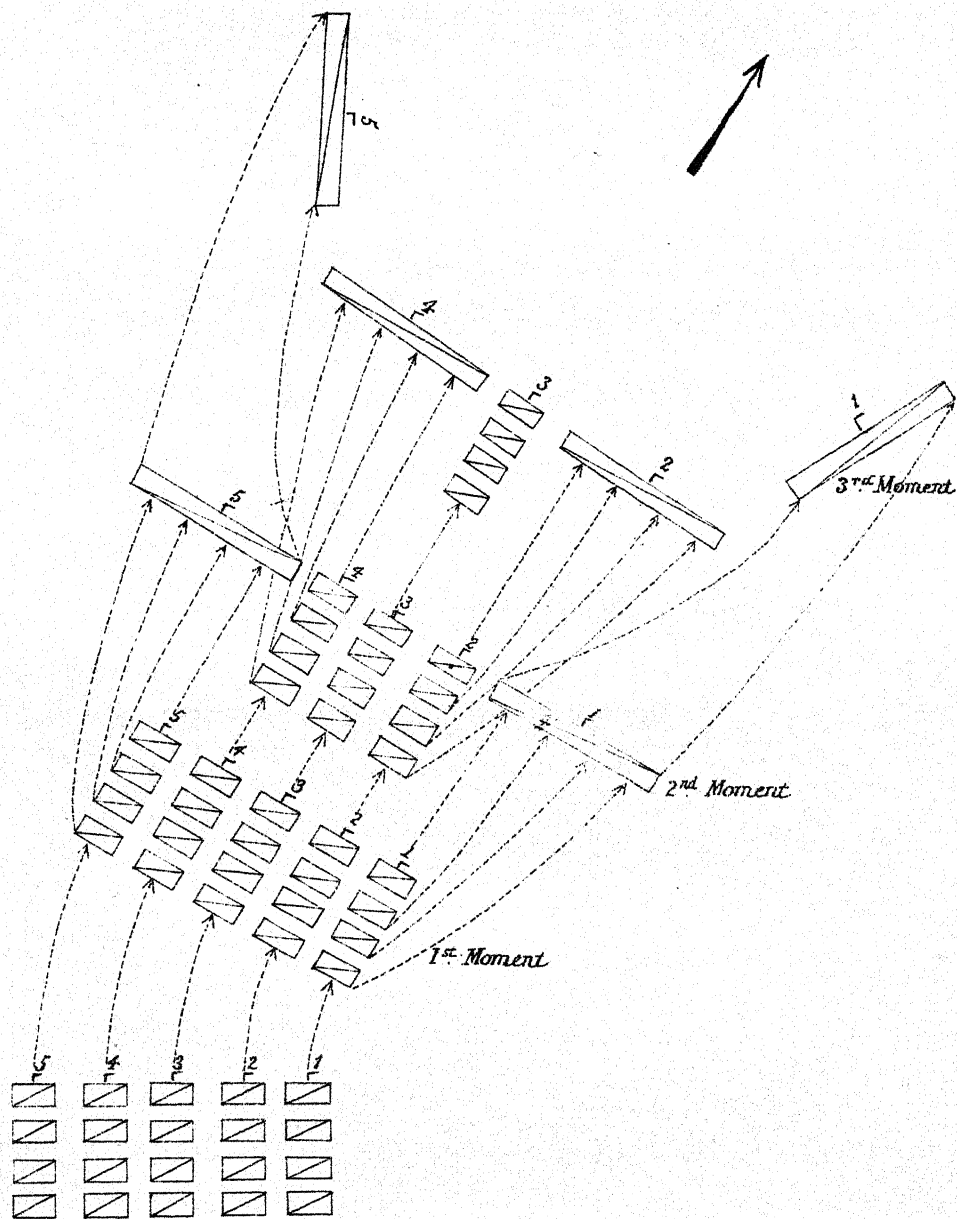
1. Correct direction of the column by wheeling the head and deploying to a flank (rapid and easy). Fig. 83. Pl. VIII.
2. Bringing the head of the column directly towards the object, taking full interval from the centre or either flank, and forming line to the front (longer than the former). Fig. 82. Pl. VIII.
3. Breaking into zug column, giving the proper direction to the head of the column, and wheeling into line (simple and effective). Figs. 56, 58. Pl. V.
4. If one is absolutely compelled to oppose as large a front as possible to the enemy, *immediately*, either in the original direction of the head of the column or in the direction that may have been given to it towards the enemy, the following movement may be adopted:—The two flank squadrons form line to the front, outwards, these being for flank attack; the two squadrons next to them then form line to the front in a similar manner. Thus all the squadrons form line except the centre one. (See figure opposite.)

From Squadron Column.

To change Direction.

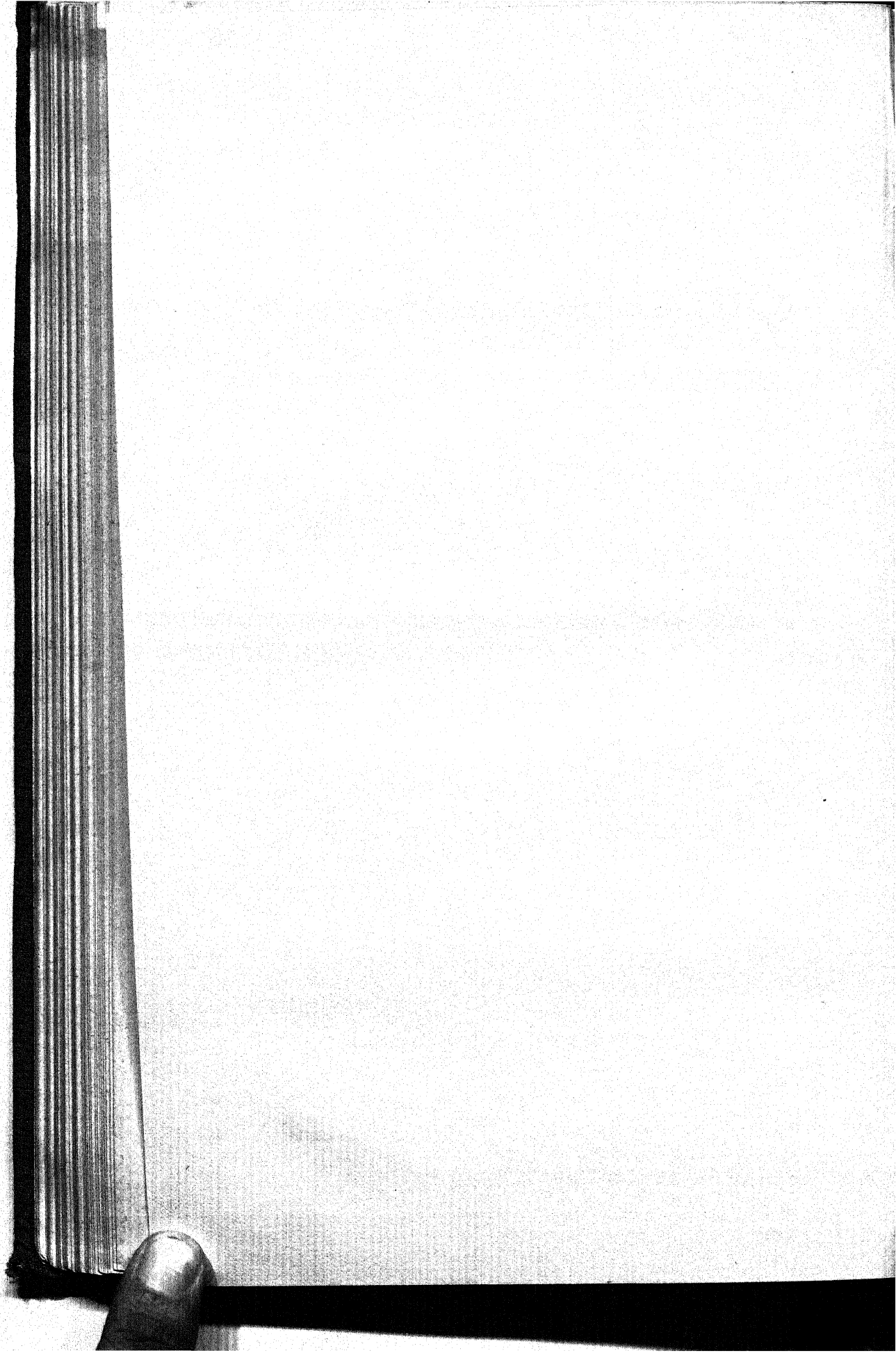
1. Slight changes of direction will be made by altering that of the squadron of direction, followed by line to the front.
2. We can change the direction of heads of squadrons half-right or left, and then sound "*Form Squadron Columns*," when all squadrons will align themselves in the new direction and resume their proper intervals, followed by line to the front. Fig. 70. Pl. VII.
3. Zugs can be wheeled half-right or left so as to form squadron half-columns; on the sound "*Form Squadron Columns*," the rear zugs of squadrons will first cover, and

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squadrons will then get their alignment and intervals as in 2, followed by line to the front.

To form line Half-right or left.

1. Heads of squadrons are wheeled half-right or left, and on the sound "*Form Line*" ("*Deployiren*"), squadrons are formed first and then regiment. Fig. 80. Pl. VII.
2. Zugs can be wheeled half-right or left into half-column, and on the sound "*Form Line*," squadrons are formed first and then regiment. Fig. 78. Pl. VII.

To form Zug Column.

1. Heads of squadrons are wheeled to the right or left, any direction given to the head of the column, change direction on a movable pivot and wheel into line. Figs. 46, 47. Pl. IV.
2. Heads of squadrons may be wheeled half-right or left, and on the sound "*Form Zug Column*," squadrons cover in zug column and can then wheel into line. Fig. 48. Pl. IV.
3. Wheel by zugs into half-column and sound "*Form Zug Column*," as in 2. Fig. 49. Pl. IV.

To form Line to the Right or Left.

If it is absolutely necessary to form line immediately to the right or left, the squadron which is next to the threatened flank wheels into line; the two squadrons next to it change the direction of their leading zugs and form line on it at full gallop; the other squadrons wheel into line and come up into line at full gallop on the other flank of the first-named squadrons, as in the figure on page 150.

From Line.

1. Slight changes of direction are regulated by the squadron of direction.
2. The whole line can be wheeled zugs half-right or left into half-column, and on the sound "*Form Line*," squadrons are formed first and then line. This is the easiest and simplest mode of forming an oblique line outwards. Fig. 87. Pl. VII.
3. The line can be wheeled zugs half-right or left into half-column, and the sound "*Form Zug Column*" given; the head of the column being then led in any desired direction. This is the easiest way of gaining an oblique direction inwards.

From Zug Column.

To form Squadron Columns.

1. On the sound "*Form Squadron Columns*," squadron columns are formed in the direction of the head of the column. Fig. 59. Pl. V.
2. Heads of squadrons can be wheeled to the right or left. Fig. 63. Pl. VI.
3. Heads of squadrons can be wheeled half-right or left, and

on the sound "*Form Squadron Columns*," squadrons align themselves on the leading squadron, with proper intervals. Fig. 62. Pl. V.

4. Zugs can be wheeled half-right or left into half-column, and on the sound "*Form Squadron Columns*," the rear zugs of each squadron cover their leading zug, and the whole form oblique line of squadron columns at proper intervals from the leading squadron. Fig. 67. Pl. VI.

To form Oblique Line.

The line can be wheeled zugs half-right or left into half-column, and on the sound "*Form Line*," squadrons are formed first and then regiment. Fig. 87. Pl. VIII.

To form Close Squadron Column.

On the sound "*Close*," close squadron column is formed on the leading squadron. Figs. 65, 69. Pl. VI.

To form Zug Column in an Oblique Direction.

Zugs can be wheeled half-right or left into half-column, and on the sound "*Form Zug Column*," the rear zugs of each squadron cover their leading zug, and the squadrons follow the leading squadron by changing direction on a movable pivot. Fig. 48. Pl. IV.

To form line to the right or left on the new alignment, the column having changed direction to the extent of the quarter or half circle, either towards or away from the enemy, and some of the squadrons not yet being in the new direction.

The parts of the regiment which have already changed direction wheel into line on the sound "*Front*," and advance to the attack; the remainder quietly form line, Fig. 85, Pl. VIII, and when in line are led to the attack by the detailed field officer as an echelon. The formation of line by the troops on the old alignment is easy when the column has changed direction outwards (towards the enemy), but more difficult when the change of direction had been made inwards (away from the enemy), as in that case the rear squadrons front form away from the enemy, and when formed must wheel about to face him.

*From Half-Column of Zugs.**

To form Oblique Line.

On the sound "*Form Line*," squadrons are formed, and then regiment. Fig. 87. Pl. VIII.

To form Squadron Columns.

On the sound "*Form Squadron Columns*," the rear zugs of

* Formed by line or zug column wheeling zugs half-right or left.—TE.

squadrons cover, and then move up in alignment with the leading squadron. Fig. 67. Pl. VI.

To form Zug Column.

On the sound "*Form Zug Column*," zug column is formed in the direction of the leading zug. Figs. 19. Pl. I, 21, Pl. II.

To form line to the opposite flank to the one towards which the half-column is moving [*e.g.*, when zugs have wheeled half-right from line].

Zugs can be wheeled to the left [forming half-column to the left], and on the sound "*Form Line*," squadrons will be formed, and then regiment.

In this way all possible changes of direction from the different formations can be executed in the most rapid and simple manner, without any uncertainty or misunderstanding; and in all these changes of formation it is understood that inversion is on no account to be shunned, and the normal is never to be preferred to the inverted formation. As the shortest routes, that is diagonal directions, must always be taken, we should never, in forming line, lose a moment through performing evolutions whose only advantage is the preservation of the normal formation.

The Regulations provide certain forms, but this is not sufficient in face of the enemy; we must be accustomed to adapt them to the varying circumstances of warfare. I have endeavoured to picture to myself the ever-changing events of war, to fancy myself in the fight itself, and to evolve the most rapid and still simplest evolutions that may be required from these various formations, with the view of reaching the threatened point in the quickest manner and with the greatest extent of front. Whether this brings us into the normal or inverted formation is immaterial, and it is equally immaterial whether we arrive at it by a regulation movement or not.

The main objects for us are—

1. *To get into the required direction as quickly as possible, and*
2. *To reach the right place in the best possible order, the place where we are sure of being successful.*

To know which is the proper place, and the right moment for being there, is then the most important thing; after that we must have the faculty of resolving quickly what we will do, together with rapid action and a thorough knowledge of the art of leading, which allows us, by means of fixed commands and sounds, to bring our force on the enemy in the most effective direction, with certainty and good order, and in good wind.

By carrying out these principles we shall be able always to arrive in fighting order at the required spot sooner than the enemy, and on this depends everything. The routine of this can only be given us by practice.

CHAPTER 4.—PREPARATORY EXERCISES FOR MANŒUVRING IN LINES (TREFFEN).

During the period of regimental drills, as soon as the regulation movements have all been thoroughly practised, the following evolutions and manœuvres, some of which are not prescribed by the Regulations, should be executed. I consider them most useful, both because they are excellent practice for the leaders, and tend to make the squadrons supple and mobile, and because they are of such frequent application in working in lines, and are thus required for divisional manœuvres.

If, before the commencement of the regimental drills properly so-called, squadrons have already been made familiar with the regulation movements required for working in regiment, they will find time to practise these manœuvres, which will be of the greatest use to them. They are as follows:—

a. THE EVOLUTIONS ESPECIALLY REQUIRED IN MANŒUVRING IN LINES, which enable them to form line with the greatest effect from any formation and in any direction; these are

1. Slight changes of direction, when in squadron columns or line, on the squadron of direction.
2. More extensive changes of direction when in squadron columns or line, effected by changing the direction of heads of squadron columns, which then align themselves, or by wheeling [from line] into half-column, followed by the formation of squadrons and regiment.
3. Forming line from close squadron column, either by advancing by squadrons from a flank, Fig. 56, Pl. V, or deploying to a flank, or opening out to full interval.
4. Forming zug column from squadron columns, by heads of squadrons wheeling half-right or left; movements in zug column; forming line from it by first forming squadrons and then regiment, or by changing the direction of the column and wheeling into line, either when all the zugs have arrived on the new alignment, or when some of them are still on the old alignment and must consequently front form and not wheel into line.
5. Formation of squadron columns and close squadron column from zug column, in short all the changes of formation and formations of line enumerated in Sect. g, Chap. 3.

b. FORMATION OF REGIMENTS IN COLUMN OF ROUTE (threes) from the right or left, in order to pass a defile. Line will be formed immediately after debouching from the defile, and movements should be at once begun.

c. MOVEMENTS EXECUTED SOLELY BY THE REGIMENTAL COMMANDER'S WORD OF COMMAND without repetition of the commands

by squadron or zug-leaders, or by squadron trumpeters; squadron and zug leaders merely pointing out the direction to be taken by their swords and giving the pace by their own horses.

d. WORKING IN SINGLE RANK, forming two regiments without any previous telling off. On the command to form two regiments, the front rank wheels zugs right (or left), and takes ground to a flank at the trot until the rear rank is uncovered, when it wheels into line and halts; the rear rank receiving the command to dress up. The regimental, squadron, and zug-leaders will then at once be posted, distributing the squadron-leaders and other officers among the two regiments. This is a most useful exercise for instructing officers and giving independence to the rear rank men.

e. CALLING OUT EACH SQUADRON SEPARATELY BY THE SQUADRON CALL, and working them by trumpet sound.

f. FORMING UP THE REGIMENT WITH THE SQUADRONS IN INVERTED ORDER and then performing field movements, each squadron being out of its usual place; e.g., from the left or right they might stand in this order: 4th, 3rd, 1st, 5th, 2nd.

g. ATTACKING IN ECHELON, FROM THE RIGHT OR LEFT, WITH CHANGE OF FRONT AND DIRECTION OF THE LEADING ECHELON, which must be conformed with by the others. The change of direction can be made inwards or outwards; the former is much more difficult for the following squadrons, but is excellent practice for developing the attention and intelligent leading of squadron-leaders.

h. THE RAPID ASSEMBLY AND RALLY OF THE REGIMENT FROM THE GREATEST DISORDER AFTER THE MÊLÉE, forming up on the regimental call behind the regimental commander. The 3rd squadron-leader places himself in rear of the regimental commander and gives the squadron call, his men rallying in rear of him; on his right form the 2nd and 1st squadrons, on his left the 4th and 5th, all rallying in rear of their leader on the squadron call. If the attack was made in inverted order, the squadrons will rally in inverted order.

The regiment will always rally on a front not far different from that of the original alignment, and will frequently do so in squadron columns; for this end the sound "*Form Squadron Columns*" must follow the regimental call.

i. A FEIGNED RETREAT AFTER A SHORT SWARM ATTACK, SO AS TO DRAW THE ENEMY ON AFTER US and bring him into disorder through rashly pursuing; this is done by the signal "*Retire*," which warns the men that "*Front*" will follow (otherwise the "*Appell*" would be sounded). This does not mean that we are to rally to the rear, but that each man is as quickly as possible to front on the ensuing sound "*Front*," thus rallying with the utmost rapidity in a forward direction, so as unexpectedly and with a compact front to fall upon and certainly overthrow the enemy, who will be in dispersed order. This is a most important thing to practise.

k. RETREAT OF THE REGIMENT; RETIRING BY ZUGS IN HALF-

COLUMN,* FOLLOWED BY "FRONT" AND AN ATTACK IN THE OBLIQUE DIRECTION THUS OBTAINED. If the half-column was formed from the right [after wheeling zugs about], line will be formed by wheeling zugs three-quarters right about on the sound "*Front*," and *vice versa*, so as to form in a direction oblique to the original line.

These exercises are more for the instruction of leaders and development of the manœuvring power of squadrons than for use before an enemy.

l. WHEELING ZUGS RIGHT OR LEFT FROM LINE, THE RIGHT OR LEFT FLANK ZUGS OF SQUADRONS WHEELING ABOUT;† in this way the squadrons are better in hand when retiring under fire than they would be if we wheeled the whole line about and then formed squadron columns.

m. ADVANCE IN CLOSE SQUADRON COLUMN. THE REGIMENT IS UNDER HEAVY INFANTRY FIRE FROM THE FRONT WHEN IN THIS FORMATION, AND THE COMMANDING OFFICER OBSERVES THAT THE RIGHT (OR LEFT) FLANK OF THE ENEMY IS EXPOSED AND UNSUPPORTED, he at once decides to attack it, and proceeds thus: the command is given "*Zugs Right About Wheel*," at first moving at the walk, then increasing the pace, followed by "*Form Zug Column*." If the column is out of range, the head of the column will change direction to the right (or left); afterwards the head will again change direction to the right (or left) and trot or gallop until the enemy's flank is gained, when the first two squadrons will wheel into line as the first echelon, and charge the enemy's flank; the next two squadrons should not wheel into line with them, but continue to march straight on in zug column, and wheel into line when they nearly cover the first two, following them as a second echelon. The last squadron proceeds in the same manner as a third echelon.‡

In this manner three lines are formed, one in rear of the other, on the weak flank of the enemy, which attack in that direction, or if the enemy presents many objects for attack (as separate groups or skirmishers), they attack these or throw themselves on the opposing cavalry which may come to their assistance.

On the mere caution for this attack in echelon, e.g., "*Attack the Right (left) in successive Lines of Two Squadrons*," the squadron-leaders ought to be thoroughly aware of what they have to do without requiring longer instructions, which indeed could not be given at the time. The Major would at once take command of the first line and wheel it into line, the next two squadrons being under the senior squadron-leader. It is of great importance to

* Executed by wheeling zugs about either from line or squadron columns, and at once ordering squadrons to form half-column from the right or left according to the direction of the enemy. Figs. 4 and 16.—TR.

† Equivalent to our "*Retire in Column of Troops from the Right or Left of Squadrons*."—TR.

‡ We should call these *successive lines* and not *echelons*.—TR.

warn the squadrons that are to form the second and third line, not to wheel into line with the first, but to continue in the original direction.

This attack against infantry must be made by several squadrons in succession, the shocks following each other closely; a single line may certainly ride over the enemy, but it cannot prevent the enemy's skirmishers who have thrown themselves down from rising and firing at their rear. To prevent this and complete the overthrow is the object of successive lines.

n. ACTING IN A SIMILAR MANNER WHEN IN SQUADRON COLUMNS, which will be the usual formation. Either the enemy has been well reconnoitred and his exposed flank has been discovered, in which case heads of squadrons are wheeled to the left or right, the column trots or gallops, gaining the enemy's flank by a change of direction, or the enemy has not been well reconnoitred, we are met by heavy fire in front and then notice the exposed flank of the enemy; we retire at first at a walk, wheel heads of squadrons to the right (or left), so as to take ground to a flank, change direction, trot or gallop till opposite the enemy's flank, then wheel the first squadrons into line to attack, and so on, as above.

o. PRACTICE OF THE ATTACK OF ARTILLERY.—To make a demonstration or divert the fire of artillery, several zugs or a squadron should attack in front in swarm-attack formation, the other squadrons charging the flank in compact order. It is of great importance that both attacks be made simultaneously, and that the flank attack be commenced if possible from under cover, so that the enemy shall not perceive it, and every advantage must be taken of the conformation of the ground.

p. WHEN THE REGIMENT IN LINE HAS TO TAKE A NEW DIRECTION BY A MOVEMENT IN COLUMN AT THE TROT OR GALLOP, WHICH SO OFTEN HAPPENS, IT WILL GENERALLY BE ADVISABLE TO COVER THE FORMATION OF LINE TOWARDS THE ENEMY. To this end the first squadron that has changed direction will move towards the new front; e.g., if the regiment has to form front to the left by advancing from the right, the command is given "*Zugs Right Wheel, the First Zug 1st Squadron Straight to the Front—Trot;*" as soon as the rest of the 1st squadron has changed direction it receives the caution, "*Advance for Flank Defence,*" the squadron-leader giving "*Zugs Half-left (or Half-right), March, Forward,*" and after moving a suitable distance in this oblique direction, "*Zugs Half-left (or Half-right), March, Halt.*" Or the first squadron will be ordered to cover the new front from the original alignment; in this case it receives "*Trot, Half-left (or Half-right), March,*" and it at once marches in line in the new direction. A similar mode of proceeding would be adopted for the left flank. The first of these methods is preferable. The formation of line can be made inwards or outwards, according as the enemy's movements require. The evolutions of the squadrons detailed to cover the changes of front remain the same, viz., always to take the shortest route, to move on the diagonal in half-column.

g. ADVANCE OF THE REGIMENT TO CHARGE IN LINE.—While at the gallop, "*Halt*." The 5th squadron advances to skirmish ["flankiren"] on the squadron call followed by "*Skirmishers Out*." The regiment retires at the trot, and the "*Appell*" is sounded for the 5th squadron, so as to draw the enemy after it. During the retirement the 1st and 2nd squadrons wheel by zugs to the left at the gallop, the leading zug changing direction half-left, and these two squadrons receive the signal "*Front*" at the same time as the three retiring squadrons; a concentric attack is then made on the enemy who is pursuing in disorder.

The 5th squadron, which had advanced to skirmish and was recalled by the "*Appell*," must in this case clear the front of the regiment as rapidly as possible, wheeling zugs right (or left) to do so, and subsequently wheeling the leading zug half-right (or left) and attacking the enemy's flank at the same time that the regiment attacks it in front. Whether the squadron-leader will edge away to the right or to the left depends on the circumstances of the fight, the conformation of the ground, and the formation of the enemy, and not on the number of the squadron; he will go where he thinks his flank attack will be most effective and where he cannot himself be taken in flank by the enemy.

7. INSTRUCTION OF INDIVIDUAL SQUADRONS IN THE DUTIES OF FLANK-ATTACK AND FLANK-DEFENCE during the attack of the regiment. The squadron detailed for making the flank-attack must not hug the flank of the regiment in half-column, but gain ground to the flank while advancing, so as to get plenty of ground in front of it for the attack.

When forming the flank-defence the selected squadron can remain on the flank of the regiment until the command "*Marsch*—*Marsch*," when it wheels into line and takes ground to the flank while advancing. On the command "*Halt*," this squadron should either be in prolongation of the front of the regiment, or even further in advance, but it should on no account be in rear of it. The flank-attacks require much greater rapidity and skill than one generally sees. The simplest way of executing these two evolutions is the following:—

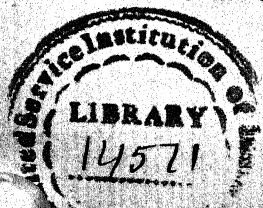
(a.) *The right flank-squadron is to execute the flank-attack.*

If from line, it will advance in half-column (of zugs) from the right at the gallop, advance, wheel into line and charge; or wheel zugs half-right, gallop, cover in column, the head taking the required direction, wheel into line, and charge.

If from squadron column, the leading zug will change direction half-right, gallop, the leading zug taking the right direction, wheel into line, and charge; or wheel zugs half-right into half-column, gallop, cover, wheel into line, and charge.

(b.) *The right flank-squadron is to form the flank-defence.*

From line, advance in half-column from the left at the gallop,



wheel into line outwards, advance at the gallop, and charge.

From squadron column, wheel zugs half-right into half-column, thus taking ground to the right while advancing at the gallop, form line to the front, and charge; or leading zug change direction half-right, gallop, the leading zug taking the required direction, line to the front on the right or left at full gallop, according to the position of the enemy, and charge.

With the left-flank squadron we should proceed in a similar manner.

s. INSTRUCTION OF ALL THE SQUADRONS AS FLANK AND SUCCOUR SQUADRONS.

t. THE PURSUIT OF THE ENEMY BY THE FLANK SQUADRONS on the trumpet sound.

u. THE FIRST LINE ATTACKS AND THE ENEMY PROLONGS HIS FRONT; A REGIMENT MUST ATTACK AS SECOND LINE IN ECHELON:

(a.) *From squadron columns to form a parallel line*; heads of squadrons wheel so as to get into zug column, wheel into line, and attack straight to the front.

To form an oblique line, which in all cases is preferable, so as to take the enemy in flank; heads of squadrons half-right or left, form zug column by trumpet sound, wheel into line, and attack.

(b.) *From close squadron column to form a parallel line*; wheel the whole column to the right or left, deploy (or break into zug-column and wheel into line), and attack.

To form an oblique line so as to take the enemy in flank, which is far preferable, change the head of the column half-right or left, break into zug column, wheel into line, and attack.

v. EVOLUTIONS OF A REGIMENT FORMING 1ST LINE TO ENABLE IT TO FORM 2ND OR 3RD LINE IN A GENERAL CHANGE OF FRONT ALREADY EXECUTED BY THE 2ND AND 3RD LINES. The shortest and easiest movement for this is as follows:—

Wheel zugs about from line, forming squadron columns while retiring, and closing into close squadron column, wheel the close squadron column towards the new front, the squadrons now being inverted.

w. A REGIMENT FORMING 2ND OR 3RD LINE ADVANCES IN ZUG COLUMN TO EXECUTE A FLANK-ATTACK, BUT THE APPEARANCE OF THE ENEMY'S RESERVE COMPELS IT TO FORM FLANK-DEFENCE INSTEAD. It will act thus; either

Form squadrons and then line, having, if necessary, first wheeled heads of squadrons into half-column in the required direction; or

Wheel the head of the column and direct it so as to threaten the enemy's flank, trotting or galloping, followed by wheel into line; squadrons that have not yet changed direction forming line to the front, and attacking in echelon; or

Form squadron columns, on trumpet sound, in the direction of the head, or in any oblique direction, if heads of squadrons have previously been wheeled, followed by line to the front, and charge.

2. THE 1ST LINE IS REPULSED; A REGIMENT IN SQUADRON COLUMNS FORMING 2ND LINE IS TO SUCCOUR AND DISENGAGE IT. —Heads of squadrons are wheeled to the left (or right), head of the leading squadron half-right (or half-left), gallop; as soon as the last zug has changed direction, the regiment wheels into line to the right (left), charging the pursuing enemy's right (or left) flank so as to release the first line. This movement must be made with the greatest rapidity, so that the attack may not be too late, but may be immediately across the rear of the retreating first line. It is very advisable to attack the pursuing enemy's flank by squadrons in echelon. It will not always be possible to wait until the whole regiment is in line, but that does not matter. What is here wanted is not a wide front, but that a compact, intact body should fall suddenly on the flank of the disordered ranks of the enemy. This will be best accomplished by those squadrons which have changed direction wheeling into line and attacking, while the portion that has not yet passed the wheeling-point should form line to the front away from the enemy, wheel about, and follow the other squadrons as a second echelon.

3. FREQUENT PRACTICE OF SEVERAL SQUADRONS FORMING FOR DISMOUNTED SERVICE WITH THE GREATEST RAPIDITY POSSIBLE. —In addition to the preceding evolutions, it is important to practise others such as would be required on service, so as to make leaders and men as apt and independent as possible, and especially to habituate the former to resolve quickly what they will do in exceptional cases; but in all these exceptional movements it must be held as an inviolable principle, that gain of time is the main consideration, and regulates the direction; while the customary adhering to the normal formation must be altogether discarded. If in the first period of regimental drills, as already stated, thorough routine grounding and confirmation in the regulation movements are the principal aim, so in the second period the true cavalry life and spirit must be the motive power of the whole drill.

Before everything, and too much stress cannot be laid upon this, the greatest certainty must be arrived at in movements in line, as these are the very foundation of the life-element of our arm, the charge. We cannot move too much in line, so as to attain certainty in this inconvenient formation at rapid paces, especially at the gallop; and this is quite possible if only the

gallop has been rightly learnt, if the fundamental principles of movements in line are strictly attended to, all dressing by eye abolished, and uniformity of pace made the basis of correct movement.

Nowhere more than in the charge are seen the necessity of precise execution, the aid afforded to the mind by fixed forms, the advantage of availing ourselves of every opportunity in the limited time at our disposal to practise gallops in line. The time and energy that we waste over superfluous movements should be utilised in practising the attack, the numerous and necessary movements in line, and individual exercises.

PART IV.—THE LARGER TACTICAL BODIES, THE BRIGADE AND DIVISION.

GENERAL INTRODUCTORY REMARKS.

THE duties that fall to the cavalry division are of two distinct kinds. In the first case, the cavalry division is employed as an independent corps in the line of battle in combination with the other arms. It will then generally act on one of the wings of the line, where it will have to move in many separate columns; the combination of these columns and formation of line from them being often difficult, require frequent practice. The formations employed must be of the simplest nature, and adapted to the ground. The tactics in lines here reach their most extended development. This mode of employing our arm is characterised by the term "*Deciding tactics*."

The second mode of employing a cavalry division is in the form of detachments, when it acts as isolated, detached, and independent bodies; this may be characterised by the term "*Detached duties of Cavalry*."

As in deciding tactics, the most important thing is to move a united mass and concentrate its effect on a particular point, so in these latter duties the cavalry moves in several distinct units. To give it the greatest independence, a battery of horse artillery will generally be added to each unit (brigade); while in the deciding tactics, when the cavalry division is used in the actual fight, the batteries unite under the command of the division-leader, and are no longer distributed among the lines. Under this head come the duties of the cavalry division in advance of an army, reconnoitring and screening, driving back the hostile cavalry, and piercing the veil which it forms, so as to ascertain the movements of the enemy, and from them endeavour to divine his intentions. To this must be added the employment of the independent cavalry division on particular missions, such as enterprises against the flank and rear of the enemy, interrupting and cutting off his communications.

Lastly, a third mode of employing our arm, as divisional cavalry attached to infantry divisions, is not connected with the duties of the proper cavalry division, as only small bodies, at the outside regiments, are used for this purpose, and they belong to the manœuvres of the infantry division.

My object now is to exhibit, in the manœuvres of the cavalry division, the advantage that results from extending the tactics

in squadron columns, and from accelerating the attack by increasing the gallop from 600 to 800 paces; but more than this: I go further, and would secure still greater progress for our arm, as I consider this absolutely necessary if we would keep pace with our sister arms, which have already progressed so enormously and are still progressing. I consider equal progress for our arm perfectly practicable, and by no means look upon it as impossible, although some of ourselves unfortunately have pretended that it is so.

I wish therefore to see the following qualities developed to the greatest possible extent in the manoeuvres of the cavalry division:—

1. There must be greater rapidity of movement without the least detriment to perfect order, which latter is the basis of every military movement, and which in our arm consists of calm, exact maintenance of pace, rapid taking up of new directions, and strict adherence to them when taken.

2. There must be greater mobility and manoeuvring power resulting from the ability to form line in all directions, and this requires that inversion should be freely used; it should be a habit, and the rule rather than the exception.

The abolition of the different counter-marches was in fact the carrying out of these principles; but we must go much further if our tactics are to make any progress, and greater mobility is to be developed. The tactics in lines furnish many occasions for, and indeed demand, the adoption of inversion, if a leader would bring his squadron to the threatened point by the shortest route, in the quickest manner, and by the simplest movement.

3. We must have more thorough independence for our arm resulting from the possession of a good long-range firearm, and from careful instruction in its use and in dismounted service; this will enable us to perform every kind of duty, which it is impossible to do on horseback. There is no occasion whatever to fear that this will impair the true cavalry spirit; indeed, it can only gain by it, as our arm will be able to accomplish its object in all situations, and will not have always to remain mounted and abandon the field or retreat before every occupied village, defile, &c., which would certainly deteriorate the spirit of the arm. I even go so far as to assert, that if cavalry is not able to fight effectively on foot under all circumstances, it is not up to its work, and is not worth the sacrifices that the State makes to maintain it. Effective diversions against the rear and flanks of an enemy could not be made, if cavalry were not able to fight on foot by whole regiments, offensively and defensively, if it could not attack localities or defend its cantonments. Its activity and enterprise, so necessary to cavalry, will thus be infinitely developed.

These three objects are constantly before my eyes, and I shall employ all my energies to realise them. I feel assured too of receiving general and ready assistance on all sides, for I take it for granted that we all wish for real progress in our arm,

(I. C.)

which we love so passionately and to which we are so entirely devoted, that we will strive to our utmost after this progress, and will never consent to its being considered merely an auxiliary or secondary arm, which can no longer claim to have any influence in decisive operations.

I. *General Principles for the Tactical Instruction, Employment, and Leading of large Bodies of Cavalry in Lines.*

CHAPTER 1.—INTRODUCTION.

Animated by an ardent desire to prepare cavalry as much as possible for manoeuvres of the division, so that the latter may be successful and profitable to both leaders and men, and may fulfil the object for which they are designed, I have been induced to record the following instructions, which will tend to bring about that mutual understanding between leaders which is so indispensable, and give the troops such an insight into the formations and movements as will enable them to satisfy the requirements of the tactics of lines as prescribed in Chapter 5* of the Cavalry Regulations. If in these directions certain fixed and special movements are indicated, to gain a particular end, it is because I am convinced that by practising these evolutions we shall greatly develop the mobility, rapidity, and manoeuvring power of our troops generally, and shall have attained the end which underlies all regimental movements. I am far from wishing to impose a mechanical routine, which would cramp the energy of individual leaders; on the contrary, I would give them the fullest liberty to employ the movements and evolutions that they think the most advantageous for each particular case. I only require that the squadron shall be able to form line with the greatest rapidity and in the most perfect order (this is the essential point) from any formation, in any direction, so as to produce the greatest effect. For this we must have the utmost simplicity of movements and absolute certainty in performing them, together with the exclusion of all possibility of mistake or misunderstanding. If the movements employed fulfil these conditions, I shall be quite satisfied with them, even though they be other than those I propose; but in view of the novelty of the subject, and of the actual state of the tactics of lines, and owing to the opportunities I have had for observation, and the experience I have acquired, I am constrained to lay down certain indications, so as to lay a foundation on which every one may build still further.

* As sanctioned on the 4th June, 1874.

I would expressly state that the newly issued Chapter 5 of the Cavalry Regulations forms in all respects the basis of the divisional manoeuvres, and that the following directions are to be considered merely as a development of the principles there established.

a. NECESSARY CONDITIONS FOR THE EMPLOYMENT OF TROOPS IN LINES.

1. So far as is compatible with the maintenance of perfect order, rapidity, manoeuvring power, activity, and mobility must be developed to the highest degree possible, for it is only through these qualities that we can regain the ground we have lost, and maintain our rank among the sister arms, which owing to technical improvements in their arms and increased individual instruction have made such great progress. According to the opinion of contemporary critics, the cavalry of the great Frederic was more redoubtable for the rapidity and adroitness of its manoeuvres and attack, than for its bravery. This is quite natural; since through these qualities, joined to the rapid initiative of their leaders, they could always arrive at the critical point and in the right direction much sooner than the enemy, and could be sure of outflanking them, the sorriest dragoon must have become brave, for he saw certain victory before him.

2. The men, both in squadron and regiment, must have acquired the greatest certainty and calm in movements in line at full gallop, and keep their compact formation in two ranks; this is the necessary condition for the compact energetic charge, which alone ensures success.

Not only is it necessary to pass over the zone of destructive fire and reach the enemy as rapidly as possible, so as not to run any risk of failure from physical or moral causes, but the compactness and force of the charge depend on the good order and calm of the squadron during the gallop preceding the charge. The gallop must not be violent, the horses changing feet from vehemence and excitement; they should be in equilibrium, the squadrons completely in their leaders' hands, and never assuming the rate of the charge without their command or trumpet sound.

The greatest pains must therefore be taken to acquire the long, regular, quiet gallop, as being the principal means of increasing our rapidity and the staying power of the horses. This is a necessity, if we would fulfil the conditions that the battlefield now requires of us; for it is only at this gallop that we can ride through the effective fire zone, if we would keep the necessary compactness of the line and would not arrive at the enemy in a decimated condition. This pace, which is generally fairly good in zug column but very irregular in line, cannot be acquired by beginning to practise it in the summer half-year; the foundation for it must be laid in the riding school during the winter half, by correct collecting and bending, &c., of the horse

by means of collected paces. Only under such circumstances will the gallop do no harm to their wind and limbs, and ensure the end aimed at, viz., to be able to march in line with bottom and with orderly ranks. First we must have the thorough training of the horses, and then accustom them to work at this gallop, gradually increasing our demands so as to obtain calm, sureness, regularity, length of stride, and bottom, to get them in good wind and inure them to greater exertions, so that they may still have full possession of their powers during the actual charge and *mêlée*. Wind and strength go hand in hand; good wind is the most important thing, and strength depends upon it. When we arrive at the above condition, the shock will be uniform, energetic, and rapid, the ranks in compact order. The resolute and orderly charge is the direct result of the previous long gallop.

If the poll be rigid, the neck stretched out, the haunches stiff, the hindhand high and not taking its share in the work, the gallop will never be attained; for the long, low, calm, and uniform spring will not be possible. All this has lately been so much misunderstood and the directions in Chapter 5 of the Regulations so misinterpreted, so much has been required of the horses without any reason or system, very much to their detriment, that I feel bound to point out and raise a warning voice against these errors. When the winter training of the horses has been thoroughly and systematically carried out, and they have been properly placed, bent, and collected, according to their individual conformations, the long gallop, to which both riders and horses must be accustomed and in which they must learn to breathe quietly, can be practised for considerable distances without injury to the animals' lungs, stomachs, or limbs. As before observed, our demands must be increased very gradually and systematically; the horse's appetite is the best test of the appropriateness of the work; a single over exertion which causes loss of appetite, may do a great deal of injury and throw the work back irretrievably.

3. Too much care and assiduity cannot be employed in the practice of the charge, the life-element of our arm and the touchstone of all our instruction; the value of a squadron can be judged by its manner of executing the attack. For this, the following are the main conditions:—

“The greatest cohesion, no depth, no hanging back of men in the rear rank, strict preservation of two ranks, zug-leaders well to the front, the charge not longer than 100 to 150 paces, and its rate tempered to the extreme pace of the slowest horse, so that cohesion may be maintained; the full gallop to be for 600 to 800 paces, the stride quiet, uniform, and even with the ground, and no restiveness or impetuosity.”

Only such charges can be considered successful as fulfil these conditions; all others, especially when the men open out, must be considered failures.

The compact, rapid charge, without depth, must be a matter

of ordinary occurrence on the drill ground; for then only can it succeed in reality. The first principle is, that *that only should be attempted before the enemy on the field of battle to which the squadron has been accustomed in time of peace, and which has become as it were ingrained in their flesh and blood*; we must therefore be careful to acquire only good habits on the drill ground.

4. Mobility, rapidity, and manœuvring power should not be diminished by the fact of working in large masses; brigades and lines should move with as great rapidity and certainty as isolated squadrons, and this can very easily be attained if the true principles are complied with and have become a second nature. These depend on uniform, steady riding, without any checking or rushing, that is, on *pace*, also on the *maintenance of direction, rapidity in taking new directions*, and lastly, *thorough independence of squadrons*, as the tactical units, no attention being paid to the momentary aberrations of neighbouring squadrons, and the leader really leading his squadron. Faults will not then propagate themselves and take larger dimensions, as is so often the case; they will be confined to the body in which they originated.

The mobility and rapid movement of large masses are greatly impaired by much repetition and taking up of sounds, by which much time is lost; a great deal of unwieldiness is the result, which is not compensated by increased certainty of movement.

Regiments should therefore very frequently drill by the commanding officer's trumpet, without repetition by the other trumpeters, as in fact must be the case in brigade. Mobility will not hereby be impaired, and the attention of the squadron will be much stimulated.

The good order and cohesion of troops in large masses, which are most essential matters, depend principally on the independence and correct movement of squadrons.

However necessary divisional drill may be, to prepare cavalry for actual warfare and give it habits which will secure it increased success in the field, such as it gained during the last war, and also to place a useful and efficient weapon in the hands of the chief, and enable us again to reckon upon the cavalry divisions in the field of battle; still it would be far better to forego these drills if they conduced to the impairment of good order, cohesion, and certainty of movement. But if we recognise and seize upon the real point of the question, we shall find that this is not the case.

The point is, and it cannot be too often repeated, the *thorough independence of the squadron, as the tactical unit, uninfluenced by any aberrations of neighbouring squadrons*, and always completely in the hand of its leader. This must be strongly insisted upon; a leader should not mechanically follow the other squadrons or allow himself to be pushed here and there by them, but must look before him and really lead his squadron; he must lead intelligently, and should be quick of resolve. For instance: if

when marching in zug column, some of the horses of the preceding squadron have fallen, and there is room to a flank, he should not ride over the fallen men and horses and so disorder his own squadron, but should move it to a flank, so as to preserve order; in short, he must act with independence and intelligence, without however ignoring his connection with the regiment as a whole.

Under all circumstances the squadron must preserve its cohesion; on no account should any files be disunited from the rest, as if at extended files, owing to irregular changes of direction. Of course we may presume that the squadron has been instructed in the true principles which are contained in the two words *pace* and *direction*.

Uniform rate of riding at the different paces, without dressing by eye, and taking up directions rapidly according to the sword and horse of the squadron-leader (or zug-leaders), are the fundamental conditions for performing the various movements with precision.

The different rates of pace laid down by regulation must be strictly adhered to by all regiments. These paces must have been previously acquired during the regimental drills, by aid of the seconds-watch and measured distances in the drill ground. When regiments are able to change direction on a movable pivot correctly, both head and rear of a column, even if there be 80 zugs, will keep the same pace, and the rear will not have to charge in order to make up its distance, while the head is continuing to trot. As changes of pace in column, which are so detrimental to the horses and to good order, and destroy the precision of all movements, chiefly result from the men obeying trumpet sounds in a dilatory manner, and performing the movement indicated much too late, they should be accustomed to good habits in this respect; otherwise precise and rapid evolutions in large masses will be quite impracticable, as nothing will be done at the exact time required, and the movements will be protracted and trailing.

For this reason squadrons must be accustomed to move in any direction without any word of command from their leader.

5. The riding-school should be so good, that falls should rarely occur. Short reins and sustained attention will do a great deal towards this, but the correct balance of the horse does still more, as a horse whose hindhand is properly supplied and active can recover himself without the aid of his rider.

6. The men should be thoroughly accustomed to the *mêlée* (hand-to-hand encounter) after the charge, as would happen on service, so as to accustom them to the complete disorder which must inevitably follow, and to enable them to practise rallying with the utmost rapidity.

This rallying in any direction, but especially towards the front, followed at once by movements without telling off the ranks, must be the object of incessant practice. Too much importance cannot be attached to this, as *whoever has the last formed body in hand remains master of the field*.

7. In order to be equal to their duties in any situation, squadrons must be thoroughly instructed in the work of flank and succour squadrons.

6. PRINCIPLES FOR THE EMPLOYMENT OF TROOPS IN LINES.

1. The main end of divisional drill is that several lines may be led under one supreme head for the achievement of a common object, a rapid understanding between the chief and subordinate Commanders being established, which can only be attained by frequent practice.

2. The fundamental principle of the tactics of lines is organization in the direction of depth, mutual assistance from the rear, concentrated energetic action of the mass on a decisive point; no lateral extension of front; no eccentric or divergent operation of the component parts, unless it be rendered absolutely necessary by circumstances; no putting forth of the whole force at the same moment, but always keeping an intact portion in hand.

3. The tactical order should never be impaired by the evolutions performed. It should be the earnest endeavour of leaders to make the larger masses as mobile and handy as individual squadrons are; their movements should not be cumbersome, but as rapid and active and free as those of smaller units.

4. An inviolable principle for the handling of large masses is, that *the squadron must in every respect be considered the tactical unit*, and this fundamental principle must on no account be infringed. This is the chief means of combining the mobility and rapidity of masses with precision and certainty of movement, especially in the most important of all formations, that of line. On the independence of the tactical unit (the squadron) depends the sole bond for preserving cohesion, certainty, and order in great masses moving at the most rapid pace. I by no means mean that the squadron should throw off every yoke, for then where would be concentric, united action? But I would insist that the squadron-leader when acting in mass, in the regiment or brigade, should really lead his squadron, have it thoroughly in hand, and be responsible for its cohesion and good order. No flank-guide should of himself, without his squadron-leader's command, close to a neighbouring squadron so as to correct an interval that may be lost, and thus deviate from his original direction; on the contrary, he must strictly maintain the direction, and ride straight forward, without troubling himself whether the interval be too large or too small. If the squadron-leader wish to correct an interval that may be too large, he will give the necessary command in an undertone, indicating the direction with his sword, as must be done by all the zug-leaders when a change of direction is made. In this way there will be no loss of cohesion. The greater the mass is (and we must be able to work in large masses with perfect cer-

tainty and order, if we would maintain our position in the field), so much the more rigorously must these principles be observed. A squadron-leader who does not fulfil these conditions under such circumstances, fails in his duty.

The more a squadron has been accustomed and trained to take up and keep any desired direction with certainty at the quickest pace, which is the most important thing after correct pace, the less likelihood will there be of intervals being lost, as that fault solely results from loss of direction. Even if intervals are lost it is nothing serious, and of much less importance than loss of cohesion.

5. It cannot be too strongly inculcated that, next to preservation of the pace and direction, and of the independence of the squadron, good order depends on the *gradual* correction of irregularities and mistakes caused by the conformation of the ground or other circumstances; these should be at once redressed in their own sphere by the individual leaders, zug-leaders and non-commissioned officers, without the intervention of the squadron-leader. The squadron must be trained to this.

6. The action of the superior and subordinate leaders on the troops under their command, whether for the performance of new movements, changes of direction, wheels of the heads of columns, &c., or to check mistakes and to prevent their extending further, or correct inaccurate direction, should be as rapid as possible. Such action cannot be too prompt.

For this, one must be able to see quickly and detect the right spot at once, so as to nip the fault in the bud. Before everything, in order to bring the troops on to the enemy in the most effective direction with calm, certainty, and order, and in good wind, we require a quick eye, quick resolve, and quick execution, with no uncertainty about words of command or trumpet sounds.

7. If misunderstandings or mistakes occur, their correction should not be effected at the walk, but at the least at the trot. Of course it is better that there should be no mistakes, and to this end the chief will contribute by giving clear cautions and indications, and the subordinate officers by correctly understanding and entering into the ideas communicated to them. Also is it of the greatest importance that the Adjutants and Orderly Officers should be well practised in transmitting orders, and that the latter should be accurately carried out so as to ensure that mutual understanding between the Commanders and the troops on which so much depends. Every precaution must be taken to prevent misunderstandings and mistakes.

8. In order not to miss the exact moment for action, the Commanders of lines, and indeed the subordinate Commanders, when acting independently, must never lose sight of the whole, of the other lines, and of the course of the fight, and they should not encumber themselves with looking after the details of their troops; only by acting in this way will they be able to act opportunely. If they would not deserve the reproach "too

late," they must comprehend rapidly, resolve quickly, and as quickly carry out their resolve; but these conditions cannot be fulfilled by Commanders if they trouble themselves about the details of their troops.

9. It must be a matter of perfect indifference to the troops whether they are inverted or in the normal formation, and even whether they attack in inverted formation. Both formations are equally authorised, and there ought under no circumstances to be any hesitation about forming inverted line if taking that formation will enable the line to be formed more quickly. On no account should long, trailing, time-wasting movements be performed, whose only object is to show a front towards the threatened flank in the normal formation.

Both leaders and men must be accustomed to inversion as to a useful and well-fitting garment, and no one ought to feel uncomfortable in it; but this will only be attained when squadrons are constantly practised in inversion; it is a sure preventative of disorder.

It is very desirable that all squadrons should, as far as possible, move off in the same manner (from the same flank), so that they may not run into one another. Detached squadrons should attend to this when rejoining the regiment. If, however, the regulation is strictly adhered to, that from squadron columns on the sound "*Deploy*" or "*Form Squadrons*" line is always formed to the front on the left, whether or not inversion is thereby caused, no confusion can occur, even if all the squadrons have not marched off from the same flank.

10. There should be no closing in of squadrons towards each other, no opening out, no crossing each other, which is all contrary to the cavalry spirit; as before stated, it is perfectly indifferent in what order the squadrons stand, so long as they are themselves well closed up and in good order, which of course is absolutely necessary.

There should be no correcting of squadron intervals at the halt, but if a squadron is very much out, it will correct it by squadron-leader's word on advancing or retiring.

11. It is necessary to be ready, and to be on the spot before the enemy; we thus obtain the moral effect of surprise, in addition to the physical effect of the shock and sabre, &c.; the result then cannot be doubtful. For this we must be accustomed to working at the most rapid pace; we cannot make our resolve too quickly, nor too quickly carry it into effect; we must be perfectly acquainted with the art of moving our men, so as to be able to bring them by sound or word of command with the utmost speed, by the simplest evolution, in the proper direction, on the decisive point, which is always the rear and flanks of the enemy.

Owing to the peculiar personal element in our arm, which gives the cavalry leader an exceptional position and importance; owing, that is, to the circumstance that he not only leads, but directly commands his squadron; ability to handle troops,

energetic action, and complete mastery of the regulation formations become of the highest importance.

To lead the squadron on the decisive point, by the shortest road, by the simplest movement, and in the most effective direction, this is what is required of leaders. Each leader should be clear about the most commonly occurring situations in which he might really be placed, and should without any hesitation make his squadron perform such movements as conduce directly to the object in view. Resolve and execution must go together.

Rectangular movements, so often seen in cavalry drill, must disappear altogether; there must be no *détours*, no moving backwards and forwards, or right and left, in order to reach a particular spot, either to go into action or to take up a position. Instead of these, diagonal directions must be taken, as being the shortest roads, without any consideration of inversion; half-column must be largely used, both in squadron, regiment, and line, as it represents the shortest road, the oblique line; through it only can we gain ground to the front and flank simultaneously, and encircle the enemy's flank. If this is done, we shall never incur the worst reproach for our arm—"too late," which means everything.

All the movements necessary for this purpose are based upon an apt combination of squadron columns and close squadron column with zug column, of half-column [of squadrons] in squadron columns with line, and of half-column in line with zug column, in short, in the judicious use of the simplest and shortest means of passing from one of the principal tactical formations (close squadron column, squadron columns, line, zug column, half-column of zugs) to another formation or to line.

* The evolutions by which these changes can be effected have already been explained in Part III, Chapter 3, *g*, of this work; it will therefore be sufficient here to allude to them, without repeating them in full, merely mentioning a few of the essential conditions which have reference to this part of the subject.

a. The simple zug column is the best formation for all flank movements near the enemy, for veiled flank marches, for massed formations in defiles, when circumstances require it, the zugs then being closed up to close distance.

b. On all occasions, from column of route, zugs will first be formed, then squadrons, and then regiment; a direct formation of regiment from zugs, on the signal to form line, is strictly forbidden. If there is danger in delay, as for instance in disengaging a line that has been repulsed, we may as an exceptional case attack by squadrons in echelons; but as a rule the attack must as far as possible be made by the regiment in line. If there is sufficient time for the second regiment to align itself on the one in front, the charge will be made in brigade, as one line; otherwise it will be executed in echelon of regiments.

* Remark by the Compiler.

c. All formations of line are invariably to be made on the move and not at the halt; as for example, taking full intervals from close squadron column, so as to form squadron columns, forming line from close squadron column, &c. There can hardly ever be any reason for doing this at the halt, and it is not cavalry drill.

d. A change to the rear from line to squadron columns and other formations, if the line is at the trot, will never, even on the usual signal, take place at the gallop, but always only at the trot; otherwise the greatest confusion would easily ensue.

When it is wished to retire by squadron columns, it is advisable, instead of using the sound "*Retire*," to wheel [from line] into column of zugs, and to let the leading zugs of squadrons wheel to the rear; squadrons will thus be better in hand.

e. If from close squadron column movements are being executed to a flank or to the rear, on the sound "*Front*," the wheel will always be made so as to form the close column towards the direction of the enemy (where the leader is), just as in zug column and squadron columns.

f. The deployment [to a flank] on the move from close squadron column on the sound "*Deploy*," similarly to the use of the sound "*Front*," is executed thus: on the sound the leader of the flank squadron nearest to the officer who caused the sound to be given, at once wheels into line towards the enemy (*i.e.*, towards the officer); the remaining squadrons wheel into line in succession as they get room, in the order of their proximity to the enemy.

The totally objectless and unpractical deployment from the rear is thus avoided, and squadron-leaders can no longer be uncertain whether, when, and where they are to wheel and form in line.

All uncertainty, misunderstanding, mistake, and hesitation, must be avoided in battle, as efficiency is thereby diminished.

This deployment on the move is an excellent means of quickly forming line to a suddenly threatened flank from close squadron column; the proper direction being first given to the head of the column by wheeling it, so as to get the desired alignment when deployed.

g. The signal "*Close*" is used for closing squadron columns to close squadron column; it is also advisable to use it for forming close squadron column from zug column, or from column of route in threes or half-sections, instead of the command "*Heads of Squadrons, Close to the Front*." It is understood that it is a fixed principle for each squadron (when in column of route) to form zugs first, as soon as it gets room, when it will take its proper place in the regimental column.

h. For the wheels of heads of squadrons in squadron columns, whether of the eighth or quarter circle, the "*Executive sound*" should be used to ensure the precision indispensable for the execution of the ensuing formation. If there be want of uniformity in this movement, as will unavoidably be the case if the

"*Executive sound*" is not used, fluctuation of the column will certainly ensue.

12. The principle of Frederic the Great must be strictly carried out; *the attack must always be directed against the weak part of the enemy, against his flanks; whenever possible the front and flank of the adversary's cavalry should be attacked simultaneously, and his rear too, if it can be done.* The great king frequently asserted that *three men in the rear do more than fifty in front.*

During the attack, then, we should still continue to manœuvre and work against the enemy's flank, to which end we may employ movements in half-column (gaining ground to front and flank), and changes of direction. The shock should always come from a direction different from the original one; this must be the rule, and should have become second nature to the troops.

What our forefathers could do, we, with our much superior material, ought certainly to be able to accomplish.

If the attack is never made except in front, and only in the direction in which the advance was begun; if it is considered dangerous or impracticable to act otherwise before the enemy, and consequently changes of direction during the attack are never practised during peace-exercises; if there is no manœuvring during the attack, and the attack is made stiffly in a rigidly straightforward direction; further, if it is considered too difficult and even impossible for 6 or 8 squadrons to break off from the flank of the 1st Line, and hurl themselves against the flank and rear of the enemy, when the great Frederic generally had this done at his reviews with 15 squadrons, and these, as an eye witness (Guibert) testifies, worked with marvellous rapidity, vehemence, and order; if this be so, I can only say that we earn for ourselves a certificate of poverty, and with these views and habits can never make one step in advance.

Experienced foreigners, men competent to give an opinion, state that the 1st Line of Frederic's cavalry, took a decidedly oblique direction during the advance, and thus always outflanked the enemy by the time it had to deliver the shock. The 2nd Line was generally formed on an oblique front, and outflanking the 1st Line threw itself, at the moment of the shock, with amazing vehemence on the flanks and rear of the enemy.

This sufficiently shows the spirit regulating the leading of lines in those days, and this spirit was the foundation of their great success. We have nothing to do with the special tactical aids then employed, which are not the same as we now use; but we must proceed in the same spirit or idea, and accordingly we must make it a fixed rule that, from the squadron up to the brigade, we must always manœuvre during the attack, and never charge in the same direction as that in which the attack was begun. Nothing ought to appear too difficult, or impracticable; the more difficult a thing is the better, as we shall accustom ourselves to overcoming difficulties, and thus shrink from nothing in time of war; we shall always keep in mind that the soldier must

be educated, and that only that can be executed in presence of the enemy which has passed into our flesh and blood.

The leader who, in presence of the enemy, is afraid to manoeuvre with his troops, gives himself a certificate of poverty, he has not properly instructed them, and proves that he has not got them thoroughly in hand. In riding straight and stiff towards the enemy during the attack, he deprives himself of the chief factors of victory, which consist of skilful leading, as well as of mobility and manoeuvring power; there then remain to him only the other extraneous factors, physical strength, superiority of numbers, and the moral force of the troops; and to rely on these alone appears imprudent, as they depend more or less upon chance and variable influences, and are thus out of his power to control. The first named factor, however, can be assumed by leaders and troops, can be assured by practice, and thus thrown into the scale of victory.

13. The advantages of ground must be utilised as largely as possible in all movements, especially with a view of approaching the enemy under cover, thus making it possible to fall unexpectedly on his flank or rear, which doubles the effect. This must become a second nature to all leaders, and they must never neglect it. Every undulation of ground which could hide the troops from the enemy must be taken advantage of, and even détours must not be shunned if they afford an opportunity of masking the troops while bringing them on the enemy. All positions of rendezvous should be under cover.

14. As far as possible the troops should be worked by trumpet sound, and not by word of command; all movements for which specific sounds have been provided should invariably be performed thus. In order to attain rapidity of execution, and to insure the sounds being understood, leaders should as often as possible employ those that have been authorised.

15. As all firing on horseback is utterly purposeless, a pure waste of ammunition, and not cavalry work, and as some undecided natures are encouraged to rely on shooting rather than on attacking the enemy's scouts personally and driving them in, while what we want is scouting, observing, and not skirmishing; on this account it will suffice, when a squadron is sent to the front, if it detaches the 4th zug still further to the front, the zug sending out only the four skirmishing files to reconnoitre towards the enemy; thus the whole of the 4th zug will not be extended.

16. During the engagement no line or regiment should be posted with its rear immediately against a wood, or against similarly impassable ground, as a lake, pond, marsh, &c.

17. Batteries in action must never be masked by flank movements; even if a détour be thus necessitated, troops must always pass in rear of them. In all forward movements and retirements, leaders must take care to leave the line of fire free as long as possible, so that the artillery may be able to act to the last moment during the attack, and may cover the troops in case of a retreat.

18. Special escorts for artillery are not to be given. If a battery remains for some time in one position, and thus runs some risk in retiring, the troops nearest to it must, without waiting for any specific order, advance towards it, and secure its disengagement and safety by a short attack. This is a question of honour, and detachments nearest to artillery are responsible for its security.

19. Lines and regiments must as quickly as possible make room for batteries when their employment is necessary, and when, during peace exercises, their action is ordered. Batteries are never to be in the rear of a column of route, nor of a rendezvous position, but always so far to the front that their safety is not compromised, and towards the flank where their action will be most effective.

Concluding Remarks.

The plumb-line for all our work, which has since become the basis of everything, should be the fundamental principle of Frederic, viz., "*Order and method always contribute to victory, and outlive everything else.*" If we strive earnestly always to act on this principle, a successful result will be certain to follow.

To sum up briefly the most important of the foregoing principles, we require:—

1. Rapid mutual understanding between the leaders and their superiors.
2. Independent action and initiative of the subordinate leaders.
3. Skilful choice of, and complete mastery over, the tactical formations; that is, the art of troop-leading.
4. Combination of the greatest rapidity with the most complete order. Rapid formations of line and unexpected excursions. Always first on the spot, before the enemy.
5. Suppleness in all marches in line; skill in making changes of direction, so as to direct one's force against the enemy's flank in order to envelop it and attack him unawares.
6. Compact order in the attack, and only two ranks; quiet, free, long and low (flat) spring in the gallop; the actual charge at 100 or 150 paces off the enemy.
7. Ability to rally with the utmost rapidity, from the greatest disorder and confusion, in any desired direction, so as always to be able to have a formed body in hand.

CHAPTER 2.—INSTRUCTION OF THE BRIGADE CONSIDERED AS A LINE IN THE DIVISION.

The exercises of individual brigades are undertaken solely to prepare them for their duties as lines. The brigades then work like single regiments, by the word of command and trumpet sound of the brigade (or line) leader.

The brigades do not manœuvre, but simply "drill," so as to make themselves ready for employment as lines; and artillery is not assigned to them.

In order to prepare brigades systematically for their duties as lines of a division, they should especially practise slight and considerable changes of direction in squadron columns and line; movements for attacking in flank, and for flank defence; and movements having both these objects in view; movements for extricating a repulsed line; formations of line from close squadron column and from squadron columns half-right or left, or to a flank; sudden changes of front; in short, all the evolutions which have already been indicated* as especially important for the tactics of lines, and which will previously have been practised by individual regiments.

I would particularly refer to the use of half-column; in it, the pace must never vary throughout; on no account should any fault in it be corrected by an increase of pace, as the evil then will only become worse and the zugs will be jammed together.

Particular attention should be paid to the two following movements:—

1. When from brigade, in line of close squadron columns, it is required to deploy [to a flank], the movement is carried out exactly the same as with a single regiment; the regiment nearest the new front (where the signal to deploy is given) deploys as a single regiment; the next regiment continues to trot until its flank squadron nearest the new front can deploy, when the latter wheels into line and forms on the 1st regiment; the remaining squadrons of the 2nd regiment wheel into line in succession, so that the whole brigade is formed in line towards the new front.

2. Wheels to the front and rear in close brigade column (the regiments standing at close intervals from each other in close squadron column) are executed by the whole as a brigade, and not by regiments.

CHAPTER 3.—THE RELATIONS OF THE LINES TO EACH OTHER.

1. In the formation and employment of a cavalry division, the distribution into 1st, 2nd, and 3rd Line, or advance guard, 1st and 2nd Line, will always be observed.

These three Lines are thus characterised: the 1st is the *Attacking Line*, the 2nd is the *Manœuvring Line*, the 3rd is the *Reserve Line* (*Bereitschaftstreffen*).

From these designations it is evident of which arms the Lines would as a rule be composed, supposing a distinction to

* Part III, Chapter 3, g, and Chapter 4.

be made between heavy and light regiments. The 1st would be formed of cuirassiers and lancers; the 2nd, as it requires the greatest manœuvring power and agility, would consist of dragoons and hussars; the 3rd would also be composed of light regiments, as it also requires great rapidity and mobility, in order to cover comparatively long stretches of ground in the shortest possible time; still heavy regiments can be employed in the 3rd Line, but not as a rule in the 2nd. But as the three Lines cannot retain their original places during the fight, and their denomination changes with their employment and position, which will again and again vary with the features of the combat, the heavy regiments will, as a matter of course, frequently come into second line. The foregoing distribution of the cavalry division, therefore, can only be looked upon as the theoretical normal formation.

In order to prevent mistakes and misunderstandings, the Lines (brigades) will always be designated by the names of their commanders.

The three Lines in which the division is formed have distinct duties to perform, and act in concert with one another in certain definite formations. The fundamental formations are squadron columns and close squadron column according to the formation of the next preceding line. It is understood that line is the only formation for attack.

The principal formations in which the Lines will generally be formed by preference are:—

For the 1st Line, squadron columns and line.

For the 2nd Line, squadron columns and close squadron column (the two regiments being at full deploying* interval from each other).

For the 3rd Line, close squadron column (the two regiments being at close or full deploying* interval).

Under all circumstances, perfect unity of action, reciprocal support, and cohesion of the three Lines are absolutely necessary.

The movements of the enemy and the endeavours of the 1st Line to gain his flank necessitate larger or smaller changes of direction for all three Lines; these will test the manœuvring qualities of the troops, and will show their mobility and power to move unexpectedly and rapidly in any direction where their action may be effective.

Moments are precious with our arm; once past, the opportunity does not come again. We must therefore profit by it as quickly as possible, usually too without waiting for orders, if the situation clearly calls for action. To execute an attack too late, is simply to beat the air; it does no good, and only produces baneful results.

The 1st Line is at first formed in close squadron column;

* By "deploying," interval is of course meant the "full" interval required for forming line to the front.—TR.

On leaving the place of rendezvous, it opens out to squadron columns and puts off forming line for attack as long as possible.

The *2nd Line* is formed in close squadron column in the place of rendezvous, advances in this formation, outflanking the 1st Line on its threatened flank, and as a rule opens out to squadron columns when the 1st Line forms line. Some squadrons (generally two) from the 2nd Line are sent as succour squadrons to the 1st Line, either in line or in zug column at considerable intervals apart, and at from 100 to 150 paces in rear of the 1st Line. The rest of the 2nd Line maintains a distance of 300 paces from the 1st. When there is a reserve (3rd Line), the whole of the 2nd Line may be employed to succour the 1st Line, filling up the gaps caused by its changes of direction, and serving for flank attacks and protection, to decide the issue of the fight, secure the victory, and force back the enemy. If, however, there is no 3rd Line, this must never be done. In that case the leader of the 2nd Line must always keep a portion intact as a reserve for any eventuality, to meet a sudden flank attack of the enemy, or to cover the retreat of the 1st Line and attack the pursuing enemy. Something must always be kept in hand by the leader of the 2nd Line. The 2nd Line will change direction when the 1st Line is so near the enemy that he cannot change his, and when the movements of the enemy render such changes necessary.

The *3rd Line* (Reserve) follows the 1st at 450 paces distance, in rear of the flank opposite to that where the 2nd Line is placed. It is formed in close squadron column, the two regiments being as a rule at full (deploying) interval apart.

In changes of direction, and when it is necessary to fall on the enemy's flank, the attack will be made by the 2nd or 3rd Line. The 3rd Line will frequently find favourable opportunities for manœuvring against and attacking the enemy's flanks, while the 2nd Line attacks him in front.

2. In the exercise of cavalry divisions the following phases of the combat should always be kept in view, just as they present themselves in actual warfare.

- (1.) *The reconnaissance.*
- (2.) *The preparation for attack.*
- (3.) *The formation of line for attack.*
- (4.) *The attack, which falls under four heads: either—*

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| <p>a. The attack succeeds with a mêlée, the 1st Line being broken up.</p> | } | <p>Several squadrons of the 1st Line always pursue, the closed squadrons following them at 200 paces distance.</p> |
| <p>b. The attack succeeds without mêlée, as when the enemy retires without waiting for the attack, the 1st Line not losing its compact order.</p> | } | <p>Several squadrons again follow in extended order (swarm-attack), followed by some squadrons in compact order.</p> |

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| c. The attack is discontinued, the troops voluntarily retiring without attacking, on account of unfavourable circumstances. | } | The force retires under the protection of one squadron, which drops skirmishers in rear of it. |
| d. The attack fails, the troops retiring in disorder. | } | The force retreats as rapidly as possible on the sound " <i>Appell</i> ," covered by the attack of the 2nd Line, or the 3rd Line is brought up. |

(5.) *Changes of Direction.*—The enemy appears on a flank; the 2nd or 3rd Line advances as rapidly as possible in his direction.

The reconnoissance and preparation for the attack will naturally be effected by the advanced guard; the execution of the attack being undertaken by the 1st Line, or with the assistance of the 2nd; and the decisive blow dealt by the 2nd or a part of the 3rd.

The advanced guard, as soon as the reconnoissance, preparation, and formation of line for the attack are made, will as a rule form the 3rd Line, and will be employed as such as soon as the 1st Line comes into action.

If the enemy suddenly appears on a flank, changes of direction will always be made by the 2nd or 3rd Line, while the 1st temporarily stands fast and becomes 2nd or 3rd Line when the original front is no longer threatened.

No line should neglect to have fighting-patrols [*Gefechts-patrouillen*] on the flanks, in order to observe; moreover, the original front, when it is abandoned in order to work towards a flank, must continue to be observed by a squadron which will push out fighting-patrols.

3. It should be a fixed principle that, in attacks against cavalry, the 1st Line is so directed as to envelop one of the flanks of the enemy; that is, it attacks the enemy's front in an oblique direction; while the 2nd Line envelops the other flank with part of its force, and with the rest holds itself ready to fall upon any reserve of the enemy that may appear.

Exact coincidence in the shocks of 1st and 2nd Lines against the enemy's ranks is by no means necessary, and indeed is not natural; on the contrary, the compact attack of the 2nd Line will have so much more effect if the enemy is in the complete confusion of the *mêlée*. Of course this attack of the 2nd Line must not be too late, and in peace exercises it should be regulated by the probable duration of the *mêlée*.

Consequently it is absolutely necessary that the leader of the 2nd Line should never allow it to have a greater distance than 300 paces from the 1st Line, so as to be able to intervene at the right moment; it is most necessary, and at the same time diffi-

cult, to observe when the 1st Line is advancing to the charge, as the pace is then so much increased. Still it can very well be done if the leader will only follow the movements of the 1st Line with unremitting attention, and follow it up circumspectly and resolutely. There must on no account be any hesitation, or the terrible reproach "*Too late*" will be the result.

4. It will never be accounted an error on the part of the 2nd Line if it causes a portion of its force to participate offensively and concentrically in the combat of the 1st Line, when it receives no explicit orders to that effect or a misunderstanding of orders occurs. Inactivity and want of initiative are much worse.

5. The relation of the Lines to each other—their mutual connection—must be strictly maintained under all circumstances. In no case should a Line or regiment charge on the flank of a more advanced Line. Leaders must be well instructed, see clearly, and lead their troops on the right spot (the flank or rear of the enemy) in the right direction. No rear Line should come into line with the 1st Line until the latter comes in contact with the enemy, and joining in is allowable; nor can a Line be permitted to disappear altogether, and thus be unavailable, unless some special mission has been given to it. The 2nd and 3rd Lines should never attack in the same direction as the 1st, on its flank, as in that case they would be attacking in the air, without any object; supposing the 1st Line to have attacked correctly and to have directed itself against the flank of the enemy. It cannot be too often repeated that the attack should always be carried out concentrically against the enemy's flank.

6. If an advanced guard has been obliged to withdraw before a superior enemy, and the Lines in rear hereupon advance against the enemy round the advanced guard, the latter must support this offensive movement by an advance; indeed it must always keep up a continued uninterrupted connection with the *gros*, so as to be able effectually and at the right moment to join in the attack. Nothing is more faulty than isolating oneself and thus losing all knowledge of what is going on on the flanks. Such a proceeding is opposed to the first principles of the Line tactics, which demand united, concentric, and continued action and mutual support. This must be strictly observed and considered as a matter of course.

7. Never, in advancing or retiring, can the passage through the intervals in another line be allowed.

8. It is a fixed principle that every repulsed body must retire perpendicularly to its line of front, and never obliquely to it. It is impossible for such a body, after being repulsed in the attack, to manœuvre to a flank, as it must be assumed that it is being pursued by the enemy. Such a repulsed body can only retire as quickly as possible in a perpendicular line, and rally to the flank and rear of the nearest intact Line, or of the reserve; 80 to 100 paces to the flank and rear of the 2nd Line or reserve.

The 2nd Line must act in accordance with this principle, and
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must therefore leave the ground perpendicularly to the rear of the attacking troops free, so as not to be run into by them, and also in order to keep in front of itself a clear field for combat and attack.

On the other hand, any body *retreating in good order*, should on no account retire directly on the 2nd Line or reserve, in order not to impede and embarrass the movements of these supporting bodies, or even cause disorder in their ranks; rather should all retiring, or even repulsed bodies, which are still capable of manœuvring, being in good order, endeavour to gain the flanks of the intact bodies which are advancing to the attack, and completely clear their front; moreover, they should front as soon as possible and again advance so as to assist in the attack.

9. Squadrons or regiments which in consequence of previous operations find themselves before the front when the 1st Line advances to the attack, must consider it their duty not only to clear the front as rapidly as possible by moving towards a flank, but must also support the attack of the 1st Line with energy and determination by a simultaneous attack against the enemy's flank, without waiting for a special order to that effect. They must not arrive too late for this, as their timely co-operation is far easier than that of squadrons which have to come up from the rear.

10. Should the Lines be marching in separate columns on different routes, they will once for all each throw out a special advanced guard, in order to clear the way in front, which will keep up communication with the special advanced guard of the neighbouring columns. These special advanced guards are drawn in as soon as the division concentrates and forms in Lines.

11. If one of the rear Lines should happen to be close to the 1st Line, with the view of joining its attack, all trumpet sounds which could easily cause misunderstanding should be avoided; the usual sounds can be made use of, but the leaders will exercise their judgment in this respect according to circumstances.

12. The following paragraphs contain a synopsis of the movements, &c., which the Lines will execute of their own initiative without waiting for special orders.

The First Line.

a. The 1st Line, as soon as it advances to the attack, opens out to squadron columns.

b. It manœuvres against that flank of the enemy which, according to existing circumstances, appears most exposed and easiest to attack, and for this end makes use of smaller or greater changes of direction; the former are executed by changing the direction of the squadron of direction; the latter, by employing half-column (oblique echelon) and from it forming squadrons and regiments, or by wheeling heads of squadrons.

c. It forms line at a suitable distance from the enemy, and even then must do its best to turn and outflank him.

d. It must not weaken its front either by detaching squadrons to hang on to the flanks, or dropping back succour squadrons in rear of the line; this must be left to the 2nd Line, which under all circumstances has to provide for the security of the flanks and rear of the 1st Line.

e. When the enemy is beaten in the mêlée, the flank squadrons will pursue on the sound "*Fanfaro*;" the other squadrons rally to the front as quickly as possible on the regimental and squadron call of the Line leader and other leaders.

f. If the attack of the 1st Line has failed, it retires at full gallop on the sound "*Appell*" perpendicularly to its front, 80 or 100 paces to the flank and rear of the intact reserve (3rd Line), when it will rally as quickly as possible on the repeated signal "*Front*" from the leader of the Line and the other leaders.

The Second Line.

g. The 2nd Line follows the 1st at 300 paces distance at the most, in close squadron column (with two-thirds of the full intervals, as two squadrons have left it to form succour squadrons), or in squadron columns. It is a rule that this Line will open out to full intervals when the 1st Line forms line, and it must keep well up to it, so as not to exceed the distance mentioned. It outflanks the 1st Line on the threatened flank.

h. It sends forward two squadrons (one from each regiment) as succour squadrons, at a distance of from 100 to 150 paces in rear of the 1st Line; these follow in line or zug-column in rear of the centre of each of the regiments of that line. These are to act for the immediate support of the 1st Line, and have to fill up all gaps which may be produced in it either by changes of direction or after a mêlée, and to this end must then enter the line and act under the orders of its leader. If the enemy is repulsed they follow the pursuing squadrons as a support, together with the rallied squadrons.

i. This Line must make every endeavour to join in the attack of the 1st Line as actively and offensively as possible, when the latter is engaged in the mêlée, and must strive to bring about a decision by an attack on that flank of the enemy which is not turned by the 1st Line, and also when possible on the enemy's rear. If there is a 3rd Line (reserve), the whole of the 2nd can be thus employed. If, on the other hand, a 3rd Line is not available, a portion of the 2nd must, *under all circumstances*, be kept intact for possible contingencies, especially in order to disengage the 1st Line if it is unsuccessful.

k. When attacking the flank of the enemy's 1st Line it must, under all circumstances, secure its own outer or exposed flank by detaching several squadrons as flank protection against any breaking forth of the enemy's 2nd Line. If it has already detached two squadrons to the 1st Line as succour squadrons,

it has only six squadrons remaining; of these it need only send two or three for the flank attack, these falling on that flank of the enemy which is not turned by the 1st Line. The remaining three or four squadrons would then be kept ready to act as flank protection against the enemy's reserve, unless it has received a definite order to carry out the flank attack with its whole strength, as the 3rd Line could be used against the hostile reserves.

l. According to circumstances, it must energetically oppose with its whole strength (except the succour squadrons sent to support the 1st Line) the enemy's 2nd Line, when the latter advances against the flank of the 1st Line.

m. It must be ready and able to do this, if the enemy's 2nd Line suddenly appears on its flank, even if the movement of attack against the flank of the enemy's 1st Line has already been begun. It must therefore always send out *éclaireurs* in front, so as to be warned in time of the approach of the enemy's 2nd Line.

n. The squadrons of the 2nd Line, which have joined by a flank attack in the action of the 1st Line, regain their relative position, after the enemy has been repulsed and pursued, by remaining halted. Only the outer flank squadron which finds itself nearest the enemy should join in the pursuit made by the two squadrons of the 1st Line. As the pursuing squadrons of the 1st Line have thus a different direction from that of the 2nd, the latter squadron, in order to avoid a collision, must take great care as quickly as possible to take the direction of the attacking 1st Line.

o. In case the 1st Line is repulsed, the 2nd must disengage it by a timely and prompt flank attack on the pursuers as soon as the 1st Line has passed. As in this case the very greatest rapidity is necessary, if the disengagement is to be effectual, it is advisable to fall on the pursuing and dispersed enemy in echelon of squadrons; the formation of line of several squadrons on the same front causes too much delay. Moreover a broad front is not so much wanted here as the rapid action of intact formed bodies on the disordered ranks of the enemy. Only the speediest help is of any use here.

The Third Line.

p. The 3rd Line has to remain in close squadron column by regiments, at full intervals between regiments, at a distance of from 400 to 450 paces from the 1st Line, outflanking it behind that flank in rear of which the 2nd Line is not placed, *i.e.*, the inward flank.*

q. As soon as the 2nd Line is engaged it, as a rule, opens out to squadron columns, and rapidly takes the place of that line

* It should be observed that when treating of the manoeuvres of Lines, the term "*Inward flank*" is applied to the one further from the enemy, the "*Outward flank*" being that most threatened, to the rear of which the 2nd Line is placed.—Tr.

when it is expended. The 3rd Line then assumes the functions of the 2nd, whose place it takes, but it must never be entirely used up in action; *a portion must always be kept intact for eventualities.*

All Three Lines.

r. While advancing, all three Lines should throw out éclaireurs before their front, whose duty is to point out the way and see that the advance is not impeded by obstacles of ground.

s. Similarly they must all send out to the flanks small patrols* (*Gefechtspatrouillen*), led by an officer or very reliable non-commissioned officer, in order to watch the flanks and observe the enemy.

t. If, after an engagement in which the enemy has been repulsed, it become necessary to execute a change of direction owing to the appearance of fresh hostile forces on the flank, in consequence of which the Lines have to form again towards that flank; the Line which was last in contact with the enemy and now comes into 3rd Line, should always keep back one squadron for further observation of the beaten enemy and to prevent his return in that direction. This squadron must send out "enemy patrols" which cling to the enemy and observe what becomes of him.

u. In changes of direction of the 1st Line (which are those that most usually occur), the rear Lines must always take up their relative position to the new front of the 1st Line by the shortest routes, which are represented by oblique lines. Large arcs, which take up a great deal of room and time, and throw the rear Lines out of all connection with the 1st, must always be avoided.

v. If, through a change of direction, one of the rear Lines suddenly becomes 1st Line, it will at once assume the proper formation of a 1st Line, squadron columns.

It is of the greatest importance that the Line-leaders thoroughly enter into and familiarise themselves with the preceding principles, as it is only through their independent action in the cases indicated that uniformity, mutual connection, and harmony of action of the Lines can be secured, and mutual, sustained, and rapid support be rendered possible, which is the main point, the very essence and foundation of the formation in the direction of depth.

All other directions that circumstances may render necessary must always be given by the chief commander, either personally or through adjutants and orderly officers.

13. It will be advisable for each Line-leader to propose the following questions to himself, and make himself clear as to the proper answers to be given:—

a. What formations have the three Lines to assume

* The term "enemy patrols" is suggested as conveying the full meaning of these bodies, seeing that they may not always be employed strictly on the flank, and their object is simply to observe the enemy.—Tr.

- (1.) If the 1st Line is still in squadron columns?
- (2.) If the 1st Line forms line to attack?
- (3.) If the 2nd Line joins in the attack of the 1st?

b. What average distances should the Lines preserve from each other?

c. How does the 3rd Line act when the whole 2nd Line joins in the combat and is totally expended?

d. How does the 2nd Line act if the 1st comes into action and has no longer free choice, but is dependent on the enemy for its movements?

e. How does the 2nd Line act when the 1st passes to the attack

- (1.) When there is a 3rd Line?
- (2.) When there is no 3rd Line?

f. How does the 2nd Line act when the first is threatened in flank by the enemy?

g. How does the 2nd Line act when gaps occur in the 1st Line?

h. How does the 2nd Line act if, when it is about to take in flank the enemy engaged with the 1st Line, its own flank is threatened by the enemy's 2nd Line; and what precautionary measures has it to take against this?

i. How does the 2nd Line act if, when standing in its proper place to the rear of the 1st Line, it is suddenly threatened perpendicularly in flank by the enemy?

k. How does the 2nd Line act if the 1st is repulsed by the enemy?

l. How does the 3rd Line act if, when in close squadron column, it is suddenly threatened by the enemy?

m. How does the 1st Line act if the movements of the enemy necessitate slight changes of direction, or if it sees cause for making such of its own accord, in order to manœuvre against the enemy's flank?

n. How are more extensive changes of direction made by Lines, so as to arrive as quickly as possible, and on the most extended front, at decisive results?

o. Which movements are the quickest, and at the same time the simplest, for the 2nd or 3rd Line, to enable them to carry out flank-attack and flank protection on the most extended front? Which enable them to make flank-attack with one part, and provide flank protection with the other?

p. How has the 2nd Line to act if the enemy's 1st Line is repulsed?

q. Can the whole of the 2nd Line be expended for the support of the 1st?

r. Can the whole of the 3rd Line be expended or employed to its full strength?

Before we appear on the drill-ground, it is necessary to make ourselves clear on all these points, as practical execution depends on them; then only shall we be prepared for manœuvring.

The following sections exhibit the movements and evolutions

for the three Lines which are most appropriate to the different cases [*a. 3; b. 4; c. 4*]; they comprise directions for the employment, formation, and duties of each of the three Lines.

No absolute model will be laid down; attention is merely drawn to the simplest means afforded by the Regulations, by which to satisfy the most urgent requirements of the tactics of Lines.

a. Directions for the Employment, Duties, Formation, and Movements of the First Line.

(1.) The 1st Line, the striking line, is designed to break into the enemy, and as far as possible to run him down with the first onslaught. If it effects this it thoroughly fulfils its object; it can do no more than ride him down. The rest belongs to the 2nd and 3rd Lines, which have to afford vigorous support to the 1st, and protect it against the enemy's reserves, or 2nd Line, to follow up the fight, to complete the victory. The successful tactics of our arm depend solely on the effective employment of the 2nd and 3rd Lines; without this all the efforts and bravery of the 1st Line are of little or no avail. This must constantly be borne in mind.

(2.) It must be laid down as a fixed principle that the leader of the 1st Line must have completed all his evolutions by the time he has arrived at a distance of 500 paces from the enemy, and can then make no more flank movements; that at 600 paces distance he can still execute flank movements by zugs, either by zugs right or left, or half-right or left; and that at 1,000 paces he may perform still more extensive flank movements.

The most strenuous endeavours must always be made to gain the enemy's flank, to work against his flank, to execute oblique movements so as to be able to attack him concentrically; to this end the half-column especially lends itself, and must be carried out with the greatest precision.

(3.) The following movements and evolutions are especially of use for the 1st Line:—

a. Slight changes of direction to the right or left on the squadron of direction during the advance in Line.

b. Greater changes of direction both in squadron columns and in line to the half-flank, by wheeling zugs half-right (or left), at once forming squadrons, then regiments, and lastly brigade; from squadron columns also, by wheeling heads of squadrons, then forming squadrons, regiments, and brigade; or by wheeling into [squadron] half-column, and forming zug-column in the now oblique direction by the proper trumpet sound, followed by the gallop, wheel into line, and attack in the oblique direction against the enemy's flank.

c. Shortest and most simple movements of the 1st Line, when it has repulsed the enemy, so as to come into 2nd or 3rd Line in the general change of front to a flank which the 2nd and 3rd Lines will already have made; thus

From line; by zugs right (or left) wheel, heads of squadrons

again wheeling to the rear; trot. Closing in of the squadron columns thus formed to close squadron column on one of the squadrons, according to the nature of the ground and other circumstances. Wheel of the close squadron column (in inverted order) towards the new front.

b. Directions for the Employment, Duties, Formation, and Movements of the Second Line.

(1.) The second line is designed—

- a. To relieve the 1st Line from all apprehension about the security of its rear and flanks while it is manœuvring against the enemy.
- b. To support the 1st Line when it charges, by itself advancing to the attack at a timely moment, so as to aid it in securing the victory and repulsing the enemy.
- c. To pursue the beaten enemy with any disposable reserves, to reap the fruits of the victory, and give time to rally to the troops which have become disordered through making the attack.
- d. To receive the 1st Line and disengage it in case it has been repulsed.

If in an exceptional case there is no 3rd Line, a portion of the 2nd must be kept in hand as reserve, as, other things being equal, the victory falls to the side which has the last intact reserve, however weak it may be, and throws it on the flank of the enemy, which should always be done if possible.

(2.) The 2nd Line follows the 1st at 300 paces distance, out-flanking it in squadron columns or close squadron column on the most threatened flank. Its distance ought not to be greater than this, or mutual connection and assistance would be out of the question; each line would then act for itself only, and the advantage of the formation of a second line would entirely disappear, and it would be doubtful whether it could join in the action in time. On the other hand, the distance between these lines should not be less than 300 paces, or the 2nd Line would involuntarily be drawn into the fight of the 1st Line, and would not have field enough for its movements, which it is of great importance that it should have.

(3.) The 2nd Line must regulate its action and movements by those of the 1st Line. As long as the latter is not engaged with the enemy, which the leader can easily judge from its movements, the 2nd Line simply follows at line distance, and can even remain all this time in close squadron column; but as soon as the combat begins, or the 1st Line forms line to attack, squadron columns must be formed; the right direction must then be taken, so as to be able to form line on the proper front.

Frequently the Chief Commander will give his directions in short orders, *e.g.*, "The 2nd Line will reinforce the 1st Line with three squadrons, keeping back two squadrons on the right flank."

Or, "Three squadrons of the 2nd Line will advance in zug column for flank attack against the enemy's right flank, three squadrons following the left flank of the 1st Line at line distance."

Or, "Some squadrons of the 2nd Line will move up into line with the 1st Line, and the other squadrons be placed in rear of one flank, or in rear of both flanks and the centre."

The support of the 1st Line by the 2nd is effected thus:—

- a. By enveloping the enemy's flank and rear by a portion of its force, while the 1st is engaged with him in the *mêlée*.
- b. By opposing with the other portion, or with its whole force, the 2nd Line of the enemy, should it threaten the flank of the 1st Line.
- c. By receiving and disengaging the repulsed 1st Line, by making an oblique flank movement and taking the enemy in flank while he is pursuing the 1st Line.
- d. By retiring with the 1st Line, when it feels itself too weak, following it in compact order, and covering its retreat.

Flank movements are most effectively executed by the 2nd Line in zug column, as it is the easiest to direct; its movements are best adapted to varying conformation of the ground, and line can be more quickly formed from it than from squadron columns taking ground to a flank.

The conduct of the 2nd Line is more difficult than that of the 1st, and a greater degree of rapidity and manœuvring power is required of the regiments composing it.

(4.) The following circumstances may render it necessary for the 2nd Line to act:—

Case a. Considerable gaps occur in the 1st Line.

Case b. The 1st Line is engaged with the enemy, and the 2nd joins offensively in the action of the former by falling on the flank and rear of the enemy; of this there are two cases, when a 3rd Line is available, and when there is no 3rd Line.

Case c. The 1st Line is engaged with the enemy; the 2nd also wishes to join in the combat offensively by falling on the enemy's flank and rear; it has already begun its movements for that purpose, when the enemy's 2nd Line appears bent on a similar object, and must be opposed.

Case d. The 1st Line advances to attack; it is menaced on a flank by the enemy's 2nd Line, which the 2nd Line must oppose.

Case e. The enemy appears suddenly on the flank of the 2nd Line; the latter must at once oppose him; there is danger in hesitation.

Case f. The 1st Line is repulsed; the second must at any risk disengage it, prevent the enemy's pursuing it, and attack the enemy in flank.

Case g. The 1st Line attacks, and the enemy prolongs his front; the 2nd Line must attack in echelon.

The following movements and evolutions would come in especially useful for the 2nd Line in the different cases just mentioned:—

In Case *a.* Send forward as quickly as possible as many squadrons as appear necessary to fill up the gaps in the 1st Line, the succour squadrons having already been used for this purpose.

In Case *b.* (1. When a 3rd Line is available.) The whole of the 2nd Line can be brought into action.

- (*a.*) *It executes a flank attack from close squadron column; wheel of the head of the column into the right direction; advance by squadrons [in zug column, Fig. 56], wheel into line towards the enemy, attack the enemy's flank in an oblique direction.*
- (*b.*) *It executes a flank attack from squadron columns; heads of squadrons wheel half-right (or left), trumpet sound "Form zug column," "Gallop," wheel into line towards the enemy, attack in an oblique direction.*

(2. When there is no 3rd Line.) Only a portion of the 2nd Line need be brought into action for offensive support of the 1st Line, while the other part is kept intact for eventualities.

- (*a.*) *Flank attack by three squadrons, and three squadrons as flank protection, from close squadron column; wheel of the head of the 1st regiment half-right (or left), break into zug column, wheel into line towards the enemy, attack on his flank in an oblique direction; the 2nd regiment follows by wheel of the head of the column half-right (or left), opens out to squadron columns, advances in this oblique direction at the gallop in rear of the 1st regiment to cover its flanks; line to the front and attack on the advancing reserves of the enemy.*
- (*b.*) *Flank attack by three squadrons, and three squadrons as flank protection, from squadron columns; 1st regiment, wheel of the heads of squadrons half-right (or left), sound "Form zug column" and "Gallop," wheel into line towards the enemy, attack in an oblique direction to the inner hand. 2nd regiment, wheel zugs half-right (or left) into oblique echelon, form squadrons, form regiment, attack in an oblique direction to the outer hand; or thus—wheel zugs half-right (or left) into oblique echelon, sound "Form squadron columns," and rapidly advance in this formation in rear of the 1st regiment until past its outer flank, and there wait until the enemy's 2nd Line appears, when at once form regiment and attack in*

an oblique direction outwards, as far as possible outflanking and enveloping one flank of the enemy.

In Case *c*. The 2nd Line is already formed in zug column in order to advance to the flank attack, when, owing to the appearance of the enemy's reserves, it is compelled to form flank protection against them.

- (a.) Squadrons are formed, and then line.
- (b.) Wheel of the head of the column, directed so as to threaten the flank of the enemy, alignment trot or gallop, afterwards line to the right (or left) on the new alignment on the sound "*Front*" (the rear squadrons not yet on the new alignment front forming), and attack in two echelons, the second one being formed by the rear squadrons which have had to form line to the front.
- (c.) Wheel heads of squadrons half-right (or left), form squadrons, attack in echelons, or (if there is sufficient time) form regiment and attack.
- (d.) Wheel zugs half-right (or left), form squadrons and then regiment, and attack. This can be done more rapidly than (c).
- (e.) Sound to form squadron columns in the direction of the head of the column, form line and attack. N.B. This formation is the slowest, and requires most space towards the front; it is, therefore, the least to be recommended, and is less preferable than (a), (b), (c), and (d).

In all such flank attacks the 2nd Line must under all circumstances leave some squadrons on its outer flank in squadron columns, to form flank protection and follow the line intact.

In Case *d*.

(a.) *Flank protection* [by the 2nd Line] *from close squadron column*; wheel the head of the column into the proper direction, open out to squadron columns, and attack the approaching reserves of the enemy. (N.B. Action on the flank of the enemy must here also be preferred to the parallel attack.) Or, if the enemy is so near that there is no room to the front for the above, wheel the head of the column completely in the proper direction to the flank, and sound "*Deploy*," or break into zug column, wheel into line, and attack. This last procedure is especially to be preferred, as, by skilfully directing the head of the column it allows of easily gaining the enemy's flank.

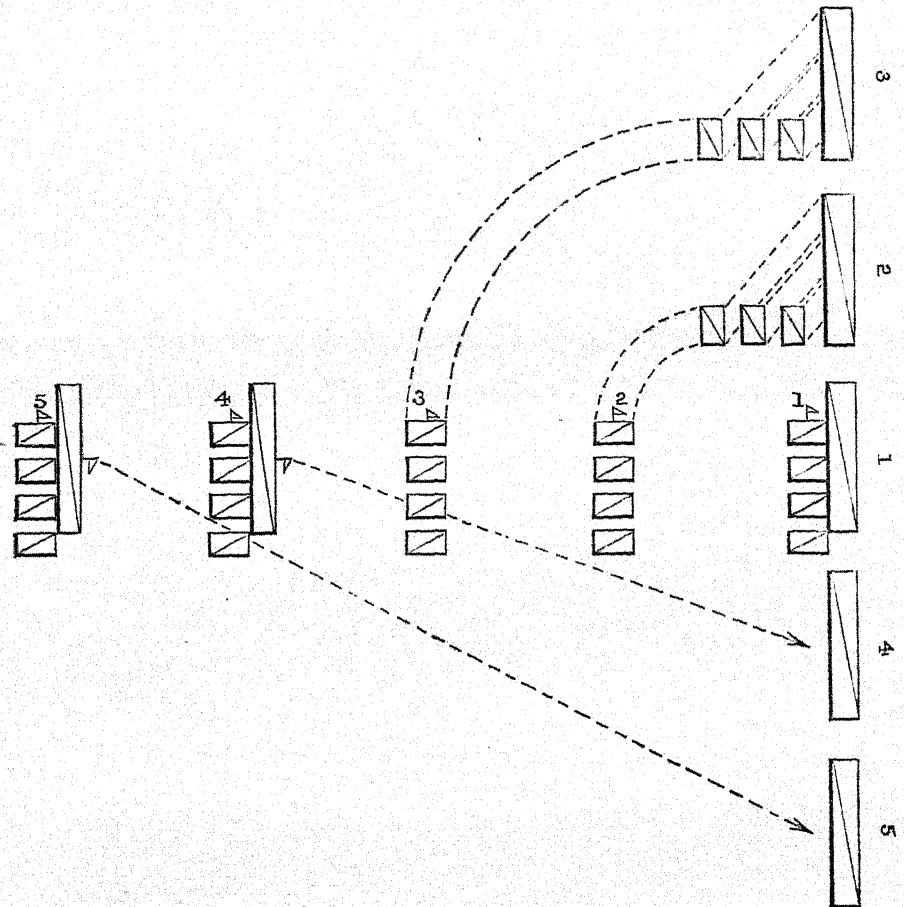
(b.) *Flank protection, from squadron columns*. The 1st regiment wheels zugs half-right (or left) into half-column, squadrons are formed, then line, followed by the attack in an oblique direction outwards. The 2nd regiment follows, passes in rear of the 1st regiment on its outer flank, and either aligns itself on it if there is time, or attacks as a second echelon on the outer flank. Or the line of squadron columns can wheel zugs half-right (or

left) into half column, followed by the sound "*Form squadron columns*" and "*Form line*."

In Case *c*.

(*a.*) *The enemy appears suddenly from the right or left front (half flank). The 2nd Line is in close squadron column. Wheel of the head of the column an eighth of a circle by the 1st regiment, the two flank squadrons form line to the front on both flanks, advance of these squadrons to the flank attack, the other two squadrons form line to the front to both hands, when they get*

THE RIGHT FLANK IS THREATENED.*



* The regiment is here taken to consist of five squadrons; generally, however, there will only be three or four squadrons, as one is detached as succour squadron to the 1st Line, and on the war footing only four squadrons would be available per regiment. The formation of line from three squadrons would be exactly similar to the above, as only the next (2nd) squadron would move on while the other one beyond it would wheel into line.

room and attack. The 2nd regiment wheels the head of the column inwards, breaks into zug column, wheels into line outwards (towards the enemy) and follows to the attack as a second echelon; or it breaks at once into zug column, the leading zug receiving the proper direction, wheels into line outwards, and advances to the attack of the enemy's flank.

(b.) *The enemy appears suddenly directly on a flank. The 2nd Line is in squadron columns*, and must form line to the flank as quickly as possible. The regiment threatened, and which has to form line to the flank, proceeds thus:—

The flank squadron nearest the enemy at once wheels into line towards him; the next two squadrons continue to advance, change the direction of their leading zugs towards the threatened flank, and form line on the squadron that wheeled into line. The other two squadrons wheel into line the same as the threatened squadron, and come up into line *en éventail* on the opposite flank of the threatened squadron. All this must be done with the greatest rapidity at full gallop.

This movement can also be executed by the next two squadrons (the 2nd and 3rd in the Plate), wheeling zugs half-right into half-column, and coming up into line in that formation.

The 2nd regiment, further from the threatened flank, does not form line in this manner; it should rather close to close squadron column, either moving forward to form a second echelon there or moving to the rear by the wheel about of zugs when it can act more effectively there as an echelon. As soon as this regiment, moving rapidly, has reached the desired point, and taken the proper direction by wheeling the head of the column so as to work against the enemy's flank, it forms line and advances to the attack.

In Case *f*. To disengage the 1st Line.

(a.) *From Close Squadron Column*.—The regiment nearest to the retreating troops wheels by zugs towards that hand,* and the now leading squadron at once attacks the pursuers in an oblique direction. The next squadron follows this movement in echelon, being directed on another part of the pursuer's force, and thus not taking the same direction as the leading squadron. The remaining squadrons follow in a similar manner, as also those of the other regiment, in echelons, each throwing itself on the enemy from its own point of view.

(b.) *From Squadron Columns*.—Wheel zugs half-right (or left) into half columns towards the pursuers, form squadrons by trumpet sound and attack in echelon of squadrons; or wheel zugs into open column of squadrons and attack in echelons, each squadron taking its own objective point in the pursuer's force; or wheel heads of squadrons to the left (or right),† head of the

* Thus forming "Regimental Column," somewhat corresponding to our Quarter Column.—Tr.

† To form zug column.

column half-right (or left), "*gallop*;" all change direction on a movable pivot, wheel into line and attack with the greatest rapidity. In this case, when the enemy is very close, it will often be necessary for the rear portions of the column to form line to the front ["line to the left (or right) on the new alignment"]; this part then follows in echelon the attack of the portion which has wheeled into line.

We must always act promptly if we wish to attain a result, but in the present case very great promptitude is required to disengage the 1st Line from the pursuers.

In Case *g*.

(*a.*) *From close squadron column, to a parallel front*; wheel the head of the column to the right (or left), and deploy by trumpet sound, or break into zug column, wheel into line and attack. *To an oblique front* (so as to take the enemy in flank, which is under all circumstances to be preferred); wheel the head of the column half-right (or left), break into zug column, giving the proper direction to the head of the column, wheel into line and attack in an oblique direction.

(*b.*) *From squadron columns to a parallel front*; wheel the heads of squadrons so as to form zug column, wheel into line and attack straight to the front. *To an oblique front* (which is in all cases to be preferred, so as to work against the enemy's flank); wheel the heads of squadrons half-right (or left), form zug column on the proper sound, wheel into line, and attack in an oblique direction.

c. Directions for the Employment, Duties, Formation, and Movements of the 3rd Line.

(1.) The 3rd Line is the *ultima ratio* by which to bring about the decision of the fight, if it has not already taken place.

This line must never be engaged in its entirety, but its leader must always keep a portion in hand for eventualities.

(2.) It follows at a distance of $1\frac{1}{2}$ line distances, *i.e.*, at 400 or 500 paces in rear of that flank of the 1st Line where the 2nd is not posted. Unless any other disposition is made, or the circumstances of the fight compel the leader to act independently, the 3rd Line will always retain this relation to the 1st. The leader can always betake himself to any point where he considers his presence necessary, in order to obtain a general view of the state of the fight.

(3.) If the whole of the 2nd Line becomes engaged or is wholly expended in supporting the 1st Line, the 3rd will, as a rule, open out to squadron columns, to be ready for combat; it then moves rapidly to the position that was occupied by the 2nd Line and assumes its functions. All that has been laid down regarding the 2nd Line will then apply to the 3rd.

(4.) As to the movements and evolutions specially required of the 3rd Line, as soon as it has taken the place of the 2nd

Line, it must act as laid down for the latter. But it may happen that the 3rd Line, while still in its usual position in close squadron column, is suddenly threatened in flank by the enemy; in such a case the following evolutions would have to be executed.

a. The Enemy appears Directly on a Flank.—The regiment immediately threatened forms line at once towards the menaced flank, either in a forward direction or towards the rear (in the latter case, zugs are first wheeled about), according to the nature of the ground and the direction of the attack; regardless of inversion, the flank squadron nearest the enemy wheels into line towards him, the rest deploying on its right or left. The other regiment, away from the threatened flank, according to the nature of the ground and the direction of the attack, breaks into zug column either forwards or to the rear, giving the proper direction to the head of the column (which may require a wheel on a movable pivot) so as to work opposite the enemy's flank, wheel into line and attack.

(b.) The Enemy appears on the Half Flank.—The regiment immediately threatened wheels its head half-right (or left), its two flank squadrons front form outwards, in order to form flank attack. Then the next two squadrons front form outwards, when free, and advance to the attack (see figure, page 108). The other regiment, away from the threatened flank acts to the greatest advantage as in *a*.

d. Directions for the Employment and Duties of Succour and Flank Squadrons.

(1.) The succour squadrons are always provided by the 2nd Line, and are usually two in number, one from each regiment; they follow the 1st Line at from 100 to 150 paces distance, in line or zug column, one in rear of the centre of each regiment of that line.

Succour squadrons should know their duties as such thoroughly, and should be well instructed in them. During changes of direction they have as quickly as possible to fill up any gaps occurring in the front, if such changes are immediately followed by the charge. If, on the contrary, at the moment of collision with the enemy they have not yet been employed, they must watch the course of the *mêlée* with the greatest attention at about 100 to 150 paces in rear of the line; and if this at any point turns to the disadvantage of their own side, as shown by the thinning of the ranks there, they must throw themselves on it in compact formation, either by zugs, half-squadrons, or squadron, according as this thinning of the ranks appears in one or several places, or to a less or greater degree, and thus endeavour to restore the fight and secure its favourable termination. They must consider this as their main business, as they are appointed to afford the most ready and immediate help to the 1st Line.

Succour squadrons which have been drawn into the 1st Line to fill up gaps, remain in their place there until another phase of

the fight, and should not be sent back. If the enemy is repulsed, they, together with the rallied squadrons, follow the pursuing flank squadrons as a support.

(2.) The duty of flank squadrons is to break off from the front as quickly as possible, of their own accord and without waiting for orders, and, according to the relative position of the Lines during the charge, either to act as flank protection (when the enemy outflanks their own side) or as flank attack (when the enemy is outflanked).

To this end they are not to be kept back in rear of the flanks in zug column, but to remain always in the front line, as their leaders can thence see better what turn the fight takes than they could if they were in rear of the front, and also because the distance to be traversed will thus be considerably diminished.

If they are to break off from line for flank attack, these squadrons or zugs are to be in half-column from the right on the right flank, or in half-column from the left on the left flank, either by advancing in half-column by zugs or by wheeling zugs half-right or left from line; in the first case they will wheel into line, in the second they will first cover off in the direction of the leading zug and then wheel into line. But these movements must be performed very rapidly so as to take the enemy by surprise, otherwise he would have time to take counter-measures; and the front and flank attacks should be as nearly simultaneous as possible.

For flank protection the squadrons are most advantageously formed in half-column (of zugs) left in front on the right flank, and right in front on the left flank, so as to be able to break outwards to cover the flanks from an attack of the enemy upon them. They keep in alignment with the front and charge outwards at the same time that the line attacks. After the completion of the attack they must remain in prolongation of the line.

Lastly, the third duty of the flank squadrons consists in this, that after the *mêlée* following the charge, if it turns out in favour of their own side, they must pursue the fleeing enemy, following him up in extended order.

CHAPTER 4.—THE ATTACK.

(1.) The charge is the life-element of our arm, as its effect on the enemy depends on this; it is therefore the very point, the touchstone of all our instruction, and the mode of executing it decides the value of a squadron. I therefore repeat here the conditions required to be fulfilled:—

- a. There must be the most complete cohesion, stirrup to stirrup, the flanks feeling to the centre.
- b. The most rapid and decided charge, covering 100 to 150 paces, so as to fall on the enemy with the greatest im-

- petuosity ; this being somewhat regulated by the quickest pace of the weakest horses, so as to retain cohesion.
- c. No depth, the ranks complete and only two of them ; the rear rank three to six paces from the front rank, riding resolutely with it, no man hanging back.
 - d. The officers well in front, and well seen by all.
 - e. The stretching gallop of about 600 to 800 paces duration, calm and uniform, smoothly over the ground, without confusion or rushing ; the horses well in hand, so that there is no fear of their breaking involuntarily into the charge.
 - f. During the attack, evolutions, oblique movements, and changes of direction to be carried out, so that the shock may always come from a direction different from that whence the attack began. As far as possible attacks should be on diagonal, oblique lines, and generally in half-column, so as to gain the enemy's flank.
 - g. Frequent practice of the attack against moving objects (individual horsemen).
 - h. Remaining in squadron columns as long as possible during the attack, so as not to be put out by any eventualities or adverse influences.
 - i. Attacking frequently in inversion, so that the squadrons may be quite accustomed to it and may not feel it to be out of the ordinary.
 - k. Ground scouts always out in front, two or three well trained men from each squadron ; their duties being to point out the best ways, and to take care that the squadrons do not fall into a *cul de sac*, or come upon impracticable ground or have to retreat when in front of a defile.
 - l. During the charge itself, the front of the attacking squadrons and regiments must be absolutely free ; all detached bodies and *éclaireurs* must therefore draw off to the flanks as quickly as possible, rally, and throw themselves on the enemy's flanks simultaneously with the onset of the attacking bodies, and not stand out of the fight with indifference. Not one sword or lance should be inactive during the charge ; the greatest stress must be laid on this.

Under no circumstances may these detached men rush directly back upon the front, thereby bringing disorder into the ranks.

- m. The leader must have reconnoitred the enemy before the attack, so as to have spied out his flanks, and thus to be able to lead correctly and regulate the direction of the attack.
- n. He must never allow himself to be attacked by the enemy, and never wait for him at the halt ; on the contrary, he should always be the first to attack, always take the initiative, and charge resolutely.

(I. C.)

- o.* He must attack with the *arme blanche*, and on no account with firearms.
- p.* The leader must seize the right moment for attack, without waiting for orders or referring to superiors; he is responsible if he allows the favourable moment to pass without taking advantage of it, and the favourable moment is that when the enemy is in disorder.
- q.* In the attack a reserve must always be kept back ready for eventualities, for the last reserve (a formed, intact body) and an attack on the enemy's flank decide the fight.
- r.* A repulsed enemy is to be pursued by only a part of the attacking line, and this will be in a completely disordered condition; the rest of the line rallies as rapidly as possible and follows the pursuers as a support.

(2.) The principles which characterise attacks on the three arms are as follows:—

a. Against cavalry.

The front and flank must be attacked; the latter either by the 1st Line which has taken an oblique direction while advancing, or by the 2nd Line.

b. Against infantry.

Infantry will always be attacked only in flank, and by several successive lines* following each other; it is necessary that the shocks should follow each other rapidly, and that the *successive lines should not outflank each other* (as in echelon) *but should cover.*

The gallop must be assumed the moment the troops enter the zone of most effective fire, that is, at least 800 paces off. Infantry must always be attacked in flank. It is a fixed rule that *a single squadron can never attack an intact square*, but there should be at least two squadrons in each line, and, as already mentioned, the attack on infantry must always be made by several successive lines of at least two squadrons each.

Consequently it is necessary that regiments and brigades should carry out the following very simple movement as the easiest mode of getting into the required formation:—

From zug column. Alignment trot or gallop, with change of direction so as to gain the desired front, as far as possible outside the zone of the enemy's fire; wheel into line of the two squadrons at the head of the column, which advance to the attack, while the other two squadrons of the 1st regiment continue to march straight along the rear of the preceding squadrons (the leading zug 3rd squadron being warned to continue the direction) until they will cover, when they too wheel into line and follow to the attack as a second line. Similarly, in the case of

* The word in the original is "echelons," but the term "successive lines," or simply "lines" has been preferred in this translation.—Tr.

a brigade, the 2nd regiment forms a third and fourth line. Of course, under certain circumstances, squadrons from each regiment may be employed in one and the same line, as when the successive lines have to consist of three squadrons each.

If there are many objects of attack (many groups of skirmishers, supports, 1st and 2nd Line, &c.), or the formation of the enemy on the flank is so deep that the original extent of front of the successive lines is too small to be able to attack the flank of the position in its whole depth, that is, to attack each individual object at the same time; the rear lines should cease in such a case to follow the 1st Line, and should be directed on such objects as have not been attacked. In this case all the lines would not follow each other over the same ground, but would diverge somewhat, those only taking the direction of the leading echelon which find no special object of attack. But this cannot be considered a favourable state of affairs, since, as a general rule, success can only be ensured by the repeated quickly following attack of several lines against the flank of the enemy's infantry, all in the same direction and covering each other.

It is therefore of the greatest importance to have thoroughly reconnoitred the enemy and his position, in order to regulate thereby the necessary extent of front of the successive lines and to avoid its being too small.

As is amply proved by numerous historical examples taken from the most glorious period of our history, there is nothing impracticable in the employment of whole regiments, or even more squadrons, in one of these successive lines; and therefore the employment of several brigades (*treffen*), or even strong divisions, may be necessary to attack the flank of an enemy's position.

If well trained, judiciously organised, and properly led, cavalry will still be able to effect results worthy of being placed side by side with those gained in former times.

c. *Against artillery.*

Cavalry must always attack in front in widely extended swarm-attack formation, so as to draw the fire, while closed squadrons or regiments *simultaneously* attack the flanks of the batteries.

The attack on the flank must as far as possible be made from under cover, so that it may be unexpected.

CHAPTER 5.—THE PURSUIT AND RALLY.

a. THE PURSUIT.

When the enemy's cavalry is repulsed, either after the *mêlée* with the 1st Line, or through the opportune intervention of the 2nd, and has to be pursued, the pursuit will be carried out (on

the sound "*Fanfare*") by the two extreme flank squadrons of the 1st, and the outer flank squadron of the 2nd Line, which must keep up the charge against the enemy in dispersed order, following him closely.

The outer flank squadron of the 2nd Line must as quickly as possible take up the same direction as that of the squadrons of the 1st Line, so as to prevent collision.

The remaining squadrons of the 1st Line, after this signal, must at once rally forwards on the regimental and squadron calls being sounded, and follow up the pursuing squadrons at the trot with closed ranks.

The pursuit must be continued by the flank squadrons as long as the wind and strength of the horses, the nature of the ground, and the measures taken by the enemy permit.

If superior reserves of the enemy appear to receive or disengage the repulsed troops, the further pursuit will be discontinued by the sound "*Appell*," on which the pursuing squadrons as quickly as possible clear the front of the bodies following them up in close order, rally towards the rear on both flanks, so as to be able to issue thence to take the enemy's reserves in flank and thus to support the frontal attack.

b. THE RALLY.

In every attack carried out up to the actual shock there will be the collision, the *mêlée* with the enemy, and the most utter disorder. This must always be marked during peace exercises by the complete breaking up of the ranks; this is necessary in order to permit of the frequent practice of the following exercise, one of the most indispensable, viz., rallying rapidly on the trumpet sound in any desired direction, as indicated by the leader's sword and the direction of his horse.

Too much value cannot be placed on this exercise, the passage from disorder to close formation, and it cannot be practised too frequently; good order with closed ranks cannot be too soon re-established. This must be done while advancing both in line (on the "*Regimental Call*" and "*Squadron Call*") and in squadron columns (on the signal following the call); it must also be done while retiring on the sound "*Front*."

In the last case the signal "*Appell*" will of course be given first, betokening that the attack is broken off, and on the sound "*Front*" each man will front and form ranks again as quickly as possible.

If the attack has been made in inverted order the rally will be in the same order; this rule must be absolute.

In order to avoid every misunderstanding, I repeat that at the signal "*Regimental Call*" (or "*Squadron Call*") the rally will always be *forwards*; and on the signal "*Appell*" always to *the rear*.

Rapid rallying is the touchstone of the whole instruction, technical and intellectual. Wherever the men have not their

horses well in hand, and they have not been trained to move smartly, wherever the men's attention is not fully alert, and they have not been accustomed to obey commands and sounds instantaneously, there will this exercise be badly performed; yet it is one of the chief means of bringing the squadron thoroughly into its leader's hand.

The great Frederic attached the greatest importance to this rapid rallying of squadrons from the most complete confusion. In the regulations for the Hussar regiments (1st December, 1743), Chap. III, Art. XVII, it is laid down—

"It must be thoroughly impressed upon the hussar that he must be most attentive to the sound "*Appell*," on hearing which each man will join his squadron and rank with the utmost rapidity possible; but as already stated, it is not necessary that they should have the same men as before on each side or in front of them;" and again,

"N.B.—His Majesty will most particularly observe that the squadrons learn to rally rapidly."

Let us conform to this; we shall then have the last formed fraction in hand on the field of battle, and thus, according to all previous experience, shall remain masters of the field. Victory cannot fail him who holds out longest.

CHAPTER 6.—PASSAGE OF DEFILES.

(1.) It must be laid down as the first principle, that whenever the passage of defiles, villages, &c., can be avoided, it is most advisable to turn such places during a combat; but if it is not possible to avoid them, they must at any rate be thoroughly reconnoitred before entering them. There can be no more fatal situation for cavalry than to be jammed up in a defile, or to be attacked in one, which will only occur through the leader's fault.

(2.) The so frequently recurring formation of line after passing a defile, at the quickest pace, from column of route in threes, right or left in front, must be thoroughly practised on the routes leading to the drill ground. This cannot be done too rapidly, at full gallop without any diminution of pace at the head of the column, the moment the ground opens out, the most perfect order being maintained. Zug-leaders must look back to the rear of their zugs and the command to front form the zugs must be given in time, while the rear of each zug is still in the defile and the last section of threes is nearly issuing from it; the word is generally given too late. Similarly the command to front form squadrons must be given when the rear zug is not quite formed, so that there may not be the slightest loss of time. Above all, it is requisite that zug-leaders keep their leading threes in hand and lead them in the proper direction. This must have been

previously acquired regimentally; it is a most necessary practice, as it seriously concerns the formation of line for attack. The greatest rapidity and most perfect order are here requisite.

When not engaged, squadrons must remain in zug column and form in regiment (in squadron columns) as soon as each is formed. For combat they form line immediately their rear zug is on the point of forming; but squadrons must invariably be formed first, and then regiment: an immediate formation of regiment from zugs is strictly forbidden. If there is danger in delay, then, as an exceptional case, the attack may be made by squadrons in echelon; but the rule remains that as far as possible the attack must be made in regimental line. If there is sufficient time for the second regiment to align itself with the first, the attack must be carried out by the brigade in one line; if there is not time for this, then by regiments in echelon.

(3.) After passing a defile it is most important—as one would of course naturally try to keep the defile open for the following troops—that squadrons which have formed should endeavour to take such a direction in advancing towards the enemy that in case of repulse they will not have to retreat directly upon the defile, but laterally, so that the formation of the following squadrons may not be hindered by them. The formed squadrons must therefore so manœuvre that their rear is not directly in front of the defile.

Although, as previously stated, every defile must be most carefully reconnoitred before it is passed, so as not to run any risk of being attacked while debouching, and thus having to halt in the defile or being thrown back into it, still the circumstances of the fight may compel the leading squadrons, after passing the defile, as explained in para. (2), for the echelon attack, to advance to the charge at once, before the rear squadrons are formed. If in this case any of the squadrons in front are repulsed by superior forces, they will certainly not be able to advance again to the attack with the squadron immediately following them, as they will not have sufficient time to rally; but presuming that their training, riding, and discipline are good, and if the men have their horses well in hand and obey the commands, signals, and call of their officers, such repulsed squadrons will be able to advance and attack together with the next squadron but one that passes the defile.

In such a difficult situation, with a defile in rear, and a superior formed enemy in front, with all the advantages of *morale* on his side, it is absolutely necessary to increase and double one's force. This can only be done by the most speedy formation of line coupled with the most perfect order, by rallying with the greatest rapidity any bodies that may be repulsed and joining them to the attacking squadrons, so as to bring as much force as possible to bear at one moment. This must ever be kept in mind by the leaders.

The saying of Napoleon the First here particularly applies, "*Se multiplier par la vitesse.*"

(4.) In retiring through a defile in presence of an enemy, it is an invariable principle to support and cover the retreat of the troops retiring in disorder from before the enemy, by pushing forward any intact bodies, and to occupy the defile strongly with squadrons dismounted with carbines. I remark on this head that troops thus acting offensively must make but short charges in order to disengage the retreating bodies, so that they may themselves be able to follow them quickly when the enemy has been brought to a standstill. They must not remain too long, or all the advantage of them would be lost.

The main point here is to disappear rapidly, and the whole art consists in not getting the defile blocked up by the repulsed bodies retreating in disorder, which, however, is always the case if the last detachments remain too long in front of the defiles. This is the greatest mistake generally made at manoeuvres, where detachments frequently delay much too long in front of the defile, and are unable to get away from the enemy and charge again and again.

CHAPTER 7.—EMPLOYMENT OF ARTILLERY.

(1.) The main object of the horse artillery attached to cavalry, as of the cavalry itself, is *the offensive*, and it must always act in this spirit.

(2.) Horse artillery plays an important rôle in cavalry warfare. Its effectiveness will be very great—(a) as a protection during the employment of cavalry; (b) to prepare the attack; and (c) to complete the victory, provided it knows how, rapidly and judiciously, to take up positions from which it can act with effect and for a long time.

Of the four distinct phases which mark a cavalry fight, the reconnaissance, preparation for the attack, formation for the attack, and the attack and pursuit, the artillery can act with full effect in two only, viz., the preparation and the formation of line. Its action in the attack itself and in the pursuit is more limited, and in all cases its effect and ability to remain long in action, which is the main point, will depend upon its officers rapidly seizing the right moment and directing their fire on the proper spot.

(3.) In the exercises of the cavalry divisions, which have for object to accustom cavalry to fight in connection with the other arms (Deciding Tactics—*Entscheidungstaktik*), the horse artillery will generally for tactical purposes be massed under its own Commander, and in these exercises is entirely at the disposal of the Divisional Commander.

On the contrary, in those exercises which have for their object the practice of the cavalry division as an independent body of troops, such as reconnaissances, demonstrations, covering the ad-

vance of an army, &c. (Detachment Tactics), the batteries are permanently attached to the three brigades; the artillery has here a much wider field of action, as it has to open the way for the cavalry.

(4.) The batteries follow all the movements of the division according to the disposition made for each day; they keep the necessary distance, so as always to be able to move to a flank as may be required. As a rule they follow in rear of the centre of the lines to which they are detailed; still the circumstances of the fight will frequently necessitate modifications in their position.

(5.) The cavalry, if formed in line, must always at once open out to make room for batteries when they have to come up to the front; regimental and squadron intervals must be utilised as much as possible for this purpose.

(6.) It must be accepted as a principle, that when the fight has actually begun, an advance or retirement must be made in echelon of batteries, so that the fire may be uninterrupted; one battery stands fast and fires while the other is moving. During a retirement each firing line covers the movement of the other.

(7.) As far as possible all artillery positions, especially during the preparation and introduction of the attack, should be *oblique*, that is, at an obtuse angle with the front, so as to take the enemy as much as possible in flank, and to ply him with oblique fire, which greatly increases the moral and physical effect of the fire.

(8.) In every change of front and every formation of line to a flank, the batteries serve as support and pivot.

(9.) A special escort will be given to the batteries only when their isolated position, or the temporary circumstances of the cavalry fight, renders it necessary. As a rule, the bodies of cavalry nearest to the guns are understood to be responsible for their protection, and they must under no circumstances leave them in the lurch. On service no special orders or summons will be considered necessary in this respect.

(10.) During the formation of line by the cavalry, and for the preparation of their attack, the batteries will as a rule take up a position in advance of one of the flanks, and generally in front of that flank which, according to the general state of the engagement, or by supposition, is considered to be the inner or protected flank, or is to serve as the pivot for changes of front; in this way they will be able to remain longer in action. For example, in a formation of line towards the right, they will seek to take up a favourable position in advance of the left flank; in a change of front of the line towards the left, on or in advance of its left flank.

(11.) At the moment when the cavalry is advancing to the attack the fire of the artillery must be increased to the utmost, but if its action has to cease when the 1st Line has advanced to the attack, then, if the ground and distance require it, it will take up a new position more to the flank, so as to be ready for

further action according to the result of the attack; on principle, it cannot take effective part in the shock, as it must keep clear of the *mêlée*.

Its co-operation with the shock of the cavalry must be a very exceptional occurrence, as when the circumstances of ground are very favourable, allowing it to act and at the same time protecting it.

So long as the batteries are not masked by the advancing line (which should happen as late on as possible, so as to permit them to act with effect to the last moment), that is, during the first part of the attack, they must remain in position and keep up their fire.

The batteries which have prepared the attack of the 1st Line should not as a rule hang back behind the 2nd Line, so that they may be able to assist in the pursuit of the enemy, if repulsed, or to cover the retreat of the 1st Line, unless indeed they have such a favourable position as will enable them to fulfil these conditions.

(12.) If the enemy is repulsed the batteries must advance at the most rapid pace so as to complete the victory, moving up to the 1st Line, and following up the beaten enemy with its fire, as long as this can be done without damage to the pursuing cavalry; here it will also be able to fire upon and shake any newly-arriving forces of the enemy, his reserves. In this case an energetic, resolute, and daring pursuit in echelon is called for.

(13.) If it is necessary to pass through a defile, it is advisable that the artillery should from the hither border of it prepare the debouch of the cavalry; at least one battery should quickly follow the cavalry when the leading regiment has passed the defile and gained sufficient ground in advance.

(14.) If, on the contrary, it is necessary to retire, the batteries must press on rapidly in the direction of the retreat, so as to take up good and (when practicable) well-covered positions, whence to fire on the enemy. Here again the retreat will be by echelons, so that the fire on the pursuing enemy may be uninterrupted. In the retreat of cavalry, artillery, owing to its enormous innate defensive power, plays the principal rôle; everything is then done under its protection. Its difficult task will then be facilitated by short charges of the intact rear lines.

(15.) In retiring through a defile, the batteries must first pass the defile, and in echelon, so as to be able to open fire betimes from the far side of it, and render the enemy's pursuit difficult.

(16.) If the division or separate Lines come up unexpectedly to act against the enemy's flank, the preparation for the attack by artillery fire will not be suitable, as the unexpectedness of the attack will thereby be annulled; the artillery will then come into play at a later stage of the fight as a support to the cavalry in the pursuit of the enemy, or in covering the retirement of the cavalry.

If it be wished to make a demonstration, if the cavalry is to divert the enemy's attention from the real point of attack, the batteries must open fire betimes.

The artillery, too, will be able to support the attack itself, when the cavalry is making a movement round the flank of the line of battle so as to make a flank attack, if from the nature of the ground there is no fear of surprise; in this case it will be sent quickly on in advance to the outer flank of our infantry (the inner flank of the cavalry), where it is protected, and will not interfere with the cavalry; from this position it will be able to act most energetically against the opposite flank of the enemy, chiefly with oblique fire, and thus to prepare the attack on this flank.

(17.) During peace manoeuvres every position must be marked by at least one shot, while important phases of the combat and supposed vigorous action of the artillery will be indicated by several shots.

(18.) In order to be always able to send orders to the batteries at the right moment, it is advisable for the commanding artillery officer to keep as much as possible near the division-leader, where he is best able to acquaint himself with the general course of the fight, and whence he can then send his orders to the batteries.

(19.) To cover the formation of line, to prepare the attack, to receive repulsed troops, to take advantage of success, to re-establish the fight when events are unfavourable, to complete the victory, these in brief are the tasks of the horse artillery attached to the division. If it acts in this sense it will not be necessary, even during peace exercises, to send explicit orders in each particular case as to the exact position to be taken up, although it may be difficult to enter into the ideas of the cavalry leader when the enemy is only imaginary.

(20.) To take up position as quickly as possible, to choose the right point from which a flanking fire can be kept up effectively and for as long a time as possible, and to remain there in position and action for a considerable time, these are the principal conditions for the harmonious co-operation and assistance of artillery; acting thus it will materially assist the action of cavalry without hampering its movements, while its own safety will not be jeopardised.

CHAPTER 8.—LEADING PRINCIPLES FOR THE PEACE EXERCISES OF A CAVALRY DIVISION IN WORKING IN LINES, AND CONVENTIONAL ARRANGEMENTS.

1. SCHEME OF THE EXERCISES.

The task of the chief commander consists in making the division manoeuvre on the ground as a unit, as a whole, so as to

develop mutual understanding between the leaders, well timed entry into the engagement, the power of seizing the right moment, just appreciation of the situation, and observation of the principles regulating the relations of the different Lines in the varying circumstances of the combat and ground. These Lines ought only to work as component parts of the division, and should never manœuvre independently.

The exercises come under the head of "Deciding Line Tactics," or of "Detachment Tactics," or they form a transition from the latter to the former.

Although it will appear from the mission given to the cavalry division to which of these two domains each exercise relates, still it is advisable to specify clearly in each daily exercise to which branch of tactics it belongs, so as to assist the imagination, as in the case of "Deciding Line Tactics" the positions in the field of the other arms must be supposed. It will facilitate matters for the leaders if they go deeply into the General Idea, as well as into the Special Object, the plan of the exercise, the situation, which must be put as clearly and precisely as possible; then, guided by this thread, in this frame founded on the strategic and tactical situation, in unity of ideas, with the common end always in view, they will be able to act concentrically with boldness and decision.

If the manœuvres are not executed by forces opposed to each other, or against a marked enemy, the whole matter will be reduced to suppositions; but such suppositions only refer to the enemy and never to the ground, which must always be taken and used as it really is.

When the enemy is supposed, much play is left to the imagination of the leaders; they are then much less cramped in their action, and are not so restricted to the direction in which the attack on the enemy is to be made; the execution of the manœuvre is then much easier than when the enemy is marked by single flags or by small detachments of troops of all arms, each provided with a flag. In the last case, where the manœuvres are against an enemy marked by infantry, cavalry, and artillery, the matter is much facilitated, as the imagination is assisted. On the other hand an object for attack is always presented, which determines precisely the movements to be executed, and requires well-timed action in the proper direction.

Let it be mentioned here incidentally, that a combat can never be decided by the marked enemy, so that the number of flags exerts no influence; the troops can never be repulsed by him. Only the position of the enemy is indicated by the flags, the foremost line, but not actual bodies of troops. A decision as to the success or failure of the attack only ensues on the order of the divisional leader. Thus the marked enemy serves merely as a target; it is merely an object without any subjective will; it stands fast or moves, never out of the walk, regulating its movements by those of the troops.

Lastly as to the third period, the working of two bodies of

troops against each other, field manoeuvres, its execution is more difficult; it closely resembles the reality and makes much greater demands upon both leaders and troops. The first requirement is that the principles of line tactics should be fully applied, acting as when the enemy's position is only marked, no lateral extension, but constant, economical arrangements for support in the direction of depth, so as to ensure united and concentric action and the most effective employment of the forces at disposal. There must be no manoeuvring of individual lines.

2. COMMANDS.

a. In order to reap the utmost advantage from military results, a mutual and rapid understanding between superior and subordinate leaders, and of the latter among themselves, is absolutely necessary. During the peace exercises every way and means must be employed to promote this mutual understanding, and we must be careful to use the utmost brevity and the most precise modes of expression. The terminology established in Part V of the new edition Cavalry Regulations, will be of great help and much facilitate the matter; the technical terms there laid down leave no room for misunderstanding, and must therefore become habitual to the troops.

Instructions will never be given out beforehand to the subordinate leaders or troops either verbally or in writing; everything must be done in the saddle. What is required will be ordered in good time through adjutants and orderly officers, but much must be done on self-initiative, through proper appreciation of the situation and the right moment for action.

As a rule it will be necessary to indicate precisely the attack against cavalry, infantry, or artillery, flank attack of cavalry, flank protection against cavalry, the direction in which the enemy is to be received, or in which the attack is to be made. This will depend upon the general idea and special object which form the basis of each day's manoeuvres, to which the leaders will make their dispositions conform. The greatest importance is to be attached to the independent and determined action of the leaders at the right spot, especially of the Line-leaders, as a decisive result will chiefly thus be arrived at. The result of an attack must always be made to depend on the correct and timely chiming in of the rear Lines; the whole course of the exercise must be determined by this.

b. Before the commencement of the period of exercises, the general idea forming the basis of the manoeuvres will be communicated to the troops assigned to the cavalry division, together with the idea which has already regulated the marches of the regiments from their garrisons to the field of manoeuvres; marches will have been conducted as if on actual service. The distribution of the *ordre de bataille* will also be communicated.

It will then be necessary to communicate to the brigades and regiments daily at the end of the drill and on the ground, the

plan for the next day's exercises; this comprises the special idea for the division, the distribution of troops (in so far as it may differ from the *ordre de bataille*), and the rendezvous for the three Lines. From this all measures necessary for adoption may be deduced; all the rest, as already stated, will be ordered on the spot personally by the division-leader or through adjutants. The sending of clerks and orderlies to divisional headquarters will thus be rendered unnecessary; and in general it is strictly enjoined to restrain to the utmost the practice of sending out orderlies, and to arrange all that is necessary with the troops on the ground, so that no horses may be unnecessarily worked on the roads, which diminishes the number of the files.

Further, it must be insisted upon that all the officers on the morning of every day of exercise, on their appearing on the exercise ground, shall be thoroughly informed regarding the plan of the manœuvre, according to the orders of the division.

3. TRUMPET SOUNDS.

a. The sound "*Appell*" will only be given on the order of the division-leader; it will always indicate that an attacking body is considered to be repulsed.

b. If "*The whole*" is sounded, which can only be done by order of the chief commander, all trumpeters will immediately repeat it, so that the executive sound, either "*Halt*," or "*Return swords*," may follow as soon as possible.

c. On the sound "*The whole*," all bodies must immediately halt where they are; on the sound "*Halt*," all will at once dismount; if the "*Officers' call*" follows, all leaders, including squadron and battery leaders and adjutants will join the division leader. If after this the sounds "*The whole, March*," be given, all will mount to continue the drill; but if the sounds "*The whole, Return swords*," be given, the troops can at once march to cantonments, even if the leaders have been called together by the officers' call.

d. Advisable as it is to allow the course of the manœuvres to proceed as on service, still there should be no hesitation in interrupting it by the sounds "*The whole, Halt*," when anything is going entirely wrong, in order to correct the mistake or practise the manœuvre again.

e. The orderly trumpeters accompanying the division-leader must know and be able to execute the regimental calls of all corps in the division.

f. If a regimental call is sounded it will be repeated only by the trumpeters of the regiment in question, as also will be any sounds following it, until the signal "*The whole*" is given.

g. The sound, "*Attention*," at the end of the drill will be repeated by all trumpeters, and thereupon all bodies of troops will form in compact order and stand fast. When the sound is discontinued, all the trumpeters will at once cease repeating it.

4. CONVENTIONAL ARRANGEMENTS FOR THE EXECUTION OF THE ATTACK, MÊLEE, PURSUIT, AND RALLY.

a. Even when there is no enemy, attacks as against the three arms must be executed in a distinctly characteristic manner; the strictest regard must be paid to the principles laid down for performing these attacks on actual service, and the mode of execution should of itself inform everyone against which arm it is supposed to be undertaken.

b. After the charge the troops will pass to the trot, by trumpet-sound, all still remaining in compact order until the command "*Break for the Mêlée*" is given; whereupon, without halting, a thorough breaking up of the ranks takes place, as would be the case in a real hand-to-hand fight. This will be terminated either by sounding the regimental call, followed by the "*Squadron Calls*," or by sounding the "*Appell*," which, as already stated, is only to be given by the division leader's order. At the first-named signal every one rallies as quickly as possible, still advancing, behind the respective leaders, and in the direction indicated by them. At the sound "*Appell*," which betokens a repulsed attack, every one turns left about and rides at full gallop, in the direction whence the attack was made, to the flank and rear of the intact 3rd Line, when, on the sound "*Front*," which must be given several times and repeated, all front quickly under cover of this Line and rally as rapidly as possible.

c. All attacks will be completely ridden out; *i.e.*, carried out to the charge inclusive, and not merely marked. The leaders must regulate their attacks by the distance and position of the object of attack.

d. When attacking infantry, where small bodies of that arm are placed as objects of attack, the troops, at a suitable distance from them, will break into the trot and receive the command "*Right and Left break off*;" whereupon, if two squadrons have attacked, the right-flank squadron passes to the right, the other to the left of the square, under its fire; if, as an exceptional case, only one squadron has attacked, it breaks off similarly from the centre. When in rear of the infantry they will again close to the centre and ride on; if the attack is considered to have succeeded, the call ("*Ruf*") will be sounded, when all the lines* that have charged reform in line at the trot, still advancing; if the attack, on the contrary, is considered to have failed, on the sound "*Appell*" all will rally to the rear at the trot. Halting and retiring in compact order before infantry at manœuvres is expressly forbidden, as it could not occur on service.

e. An attacking body which has charged has only the following movements to choose between:—

aa. *The attack has succeeded; the enemy has not waited to receive it, but has avoided it.*

* Echelons (successive lines).—Tr.

After "*Charge*" and "*Trot*," "*Halt*," the flank squadrons pursuing on the sound "*Fanfaro*," while some squadrons follow in compact order.

- bb. *The attack has succeeded, and the mêlée follows, the enemy having accepted the attack.*

After "*Charge*," open out for individual combat, to mark the mêlée; afterwards, the enemy being considered worsted, the sound "*Fanfaro*," whereupon the flank squadrons pursue in dispersed order. All the rest rally as rapidly as possible in a forward direction on the call "*Ruf*" in rear of the leaders, following the pursuing squadrons at the trot in compact order.

- cc. *The mêlée takes place, but it does not succeed.*

On the sound "*Appell*," all ride to the rear *en débandade*, rallying on the sound "*Front*" to the flank and rear of the next intact Line, which advances to disengage the repulsed troops.

- dd. *We do not accept the attack, as the enemy is too superior.*

Pass from the attack-gallop to the trot, and retire at that pace on the signal "*Retire*" to the flank of the 2nd Line, fronting and forming on it, so as to advance again to the attack when thus reinforced.

We cannot imagine any other cases, and therefore cannot practise anything else on the drill ground. All taking ground to a flank after the charge must be discontinued.

5. FORMATION FOR MARCHING PAST.

If, after the termination of the manœuvres, the troops are to form for marching past, this will be indicated by the "*Trumpeter's Call*." On the sound, regiments betake themselves at once, at the trot and by the shortest roads, without shifting here and there, to the position to be pointed out to them; here one regiment will be named by the division leader, on which the others will cover to front or rear. The formation will be in closed regimental column.*

* * * * *

6. FURTHER GENERAL RULES.

a. Regiments will appear daily at drill as strong as possible; there must be no weakening, no diminution of the front; the real effective power of a regiment is judged by this. There will be no equalisation of files between regiments, or between the squadrons of the same regiment.

All that is not present on the champ de bataille (drill-ground) does not fight; this principle will hold in our exercises; it looks

(L. C.) * Nearly corresponding with our quarter column.—T.E.

bad for the interior economy, for stable management and riding, when the number of files diminishes.

b. Squadrons will dismount the moment they reach the rendezvous, and all troops remain dismounted till the drill begins, unless the contrary be expressly ordered, even if superior officers visit the position; in that case, of course they will stand to their horses. It must be strictly insisted on, that squadrons do not arrive too early at the rendezvous; ten minutes before the commencement of the exercises is quite early enough. Directly after dismounting, the saddlery, bridling, and feet of the horses must be looked to.

c. If the regiments, dismounted from column of route of threes, are standing in a defile, the sections of threes, if superior officers visit the troops, must be so closed together in the direction of the march as to leave one side of the road free. On the command "*Prepare to Mount*," the numbers 1 and 3 turn to the right (or left) to get the necessary room.

Streets must always be left free for passage on one side.

d. In cantonments it must be rigidly insisted on, that no man saddles his horse or brings him out of the stable before the "*Saddle*" and "*Turn out*" are sounded.

e. The Line-leaders and regimental commanders ought to send their adjutants or orderly officers in the morning, to have the places of rendezvous pointed out to them, so that the troops may not have to wander about uselessly and be deprived of rest.

f. The drill-ground is to be crossed by the squadrons in zug column only.

g. The men will not be called to attention when superior officers approach, but they will take their pipes or cigars out of their mouths when they pass a superior officer, and look him in the face in the manner prescribed.

h. Marches to and from the ground must be made at the walk and trot alternately. The rear must keep up, and no horse should jog when at the walk; this can best be arrived at by placing a different zug at the head and rear of the column every day.

i. In the case of long marches, the horses should always be unsaddled on the drill-ground at the end of the drill, and the blankets shifted. On returning to cantonments, the horses will be at once unsaddled, well rubbed down, especially where pressed by the saddle and girth, and covered up. Great attention must be paid to drying the blanket, as a means of avoiding sore backs resulting from pressure.

CHAPTER 9.—CONCLUDING REMARKS.

If I have exerted myself in the preceding notes to lay down the necessary instructions and more detailed explanations of the

provisions of Part V, so as to obviate as far as possible the failings and mistakes which I have observed on many occasions, and to derive advantage from them for future exercises of the cavalry division, still I cannot suppose that notwithstanding the greatest zeal, the best intentions, and the most strained attention which each one of us undoubtedly brings to the ground, this object will be fully attained; for the imperfection of human nature is against it. Perhaps the very same mistakes will not be made, but others certainly will; yet it is to be hoped that by this preparation they will be reduced to a minimum, as the road is thus opened to mutual understanding. The preceding notes ought to serve to clear up the prospect, to assimilate the whole matter in our flesh and blood, so that the whole may as it were come out of the same mould.

However desirable it may be that the number of offences against established principles and mistakes should be small, still this is less important than that when faults and misunderstandings occur the leaders concerned should at once of their own initiative cut them short, should at once remark them, should see the matter in its true light, apply the right remedy, betaking themselves for this purpose as quickly as possible to the proper place, so that the mistake does not spread and take larger dimensions. Energy, quick decision, and determined action must be at once manifested; then will such mistakes be of great use, for they will promote the true cavalry spirit. But there must be no *laissez aller*, no letting things slide, no giving in to the unavoidable, without putting one's shoulder to the wheel, without guiding and redressing the matter with a sure and firm hand. Every leader, down to the zug-leaders and non-commissioned officers, who leads a section of the troops, must maintain strict order in his own sphere, and at once restore it if it has been lost.

This is the foundation of all; thus, once more, *we must have steady leading, resolute action on mistakes or misunderstandings occurring, or when the word of command is misunderstood, rapid perception of the decisive point, and a firm sure hold on the troops in each one's charge.*

My whole endeavour during the manœuvres will be to prove that strict order and cohesion are thoroughly compatible with the greatest mobility, manœuvring power, and rapidity; that inversion is not disorder, but the very chief means for attaining mobility and manœuvring power; that the Line tactics provide the means for bringing into play lasting, united, and concentric support from the direction of depth; and that it therefore gives more promise of success than the blow in the air of one line, even if this in face of world-known historic experiences required any proof.

I shall endeavour, as before stated, to set as daily problems the most important situations which fall to the cavalry division on actual service, so as to render the exercises as instructive as possible. But all possible situations, even the principal ones,

(I. C.)

which represent whole categories, could not be illustrated in practice, even if the drill period were ten times as long as it is; but that does not matter; if only the points of view already indicated are unfailingly observed, the principles laid down consistently attended to, we shall attain the main object, viz., there will be easy and rapid understanding between the leaders, the leading will have gained in clearness of view and readiness, rapidity and mobility will have entered the very flesh and blood of the troops, and through all these means we shall arrive at always being able to form line at the right moment and in the proper direction, *i.e.*, against the flank and rear of the enemy; then will our exercises lead direct to the goal, and we may contemplate coming events with some calmness, being suitably prepared for them; we shall always be at hand quicker than the enemy, shall always be sooner formed than he is, and thus always have a foretoken of victory in our hands. This firm confidence can and must without any boasting become part of ourselves, since God has never refused the victory to him who has exerted himself to the utmost in his work and put his confidence in Him.

II. *The Cavalry Division in Detached Employment.*

CHAPTER 10.—INTRODUCTION.

According to the ideas which are becoming more and more fixed principles with the heads of the army, our arm will be employed in future wars in the same way as in the last war, first because the administration and the whole army derived immense benefit from it, and secondly because this mode of employment suits cavalry best, it is improved by it, and obtains increased moral power. We shall have therefore to fulfil the same tasks again, but this time with more difficulty, since the enemy will not fail to employ his cavalry division in the same manner; on which account observing without being seen, reconnoitring and screening duties, will be considerably more difficult. So much the more then will it be incumbent on us to make this part of our duty clear, and to keep the guiding principles before our eyes, if our arm would perform this so important part of its rôle in the manner demanded by the safety of the army. For this end certain exercises are necessary which we have not as yet practised. Only peace exercises and instruction can give that routine knowledge to the troops, both officers and men, which is so absolutely necessary for this important service, which more than any other demands bodily and mental strain, exerts to the full the intellectual faculties, such as judgment, attention, circumspection, and reflection, as also the moral powers, decision, boldness, energy.

The exercises should serve to bring before the leaders all the occurrences and duties which could happen in reality, such as

encountering the enemy's cavalry in the open plain, finding a position occupied by the enemy's cavalry and artillery, the sudden attack by the enemy's cavalry on our outposts or advanced guard, or finding defiles occupied by small detachments of the enemy's infantry.

In all these different cases the leading thought for all our action must always be to *see without being seen, reconnoitre and screen*.

As on service the cavalry divisions will chiefly have to act independently, when the chief object will be to reconnoitre the enemy and prevent his cavalry from discovering the movements of our army, I have decided to present in the following pages the general considerations regulating these necessary and important duties, so as to prevent as far as possible any grave infractions of the main principles applicable to this important rôle of our arm, which will usually be designated strategic advanced guard duties.

I consider myself the more bound to do this, as instructions on these points have not yet been issued by authority, the whole matter is absolutely new to us, the experiences of the last war (when for the first time in our age cavalry was employed in these duties) are not very conclusive or sufficient, as the enemy's cavalry never offered the slightest opposition to our reconnaissances and screening operations, and lastly, in military literature of late many ideas and principles have been put forward, which, if put in practice, would in my opinion be very pernicious, and which I will therefore here oppose.

CHAPTER 11.—EMPLOYMENT OF CAVALRY IN TIME OF WAR.

(1.) The two tasks of executing strategic reconnaissance and covering one's own forces always coincide with each other. It is always the duty of the reconnoitring division to prevent similar action on the part of the enemy.

(2.) To a cavalry division detached to perform the above duties, certain corps of the enemy will, as a rule, be assigned as objective; it is only at the commencement of operations, before contact with the enemy and a closer acquaintance with his strategic deployment have been made, that a certain zone of country will be consigned to it, in which to feel for the enemy.

(3.) In both cases it is requisite for the brigades to keep the central route and the nearest parallel lines, with a view to rapid concentration; all neighbouring routes and features of ground of secondary importance being constantly observed by officers' patrols and a few detached squadrons sent far on in front. Each brigade or column will in this case form its own special advanced

guard, and these must keep up constant communication with each other.

(4.) Long continued detachments of stronger bodies than a squadron, and formation on a broad front with a system of supports in rear of the points* (spitzen), which is very liable to mislead people as regards the real object of the reconnaissance, both these errors must be carefully avoided. They weaken the offensive and power of resistance, and allow equally strong but concentrated forces of the enemy to break through and divide ours.

(5.) The more the enemy sees himself surrounded by "points" and patrols only, which avoid him but constantly return again, and not by tangible bodies, the more certainly will every attempt he may make to break through be frustrated, and the less will he be able to avoid perpetual observation and obtain any information for himself.

(6.) The formation and organisation of a cavalry division preceding an army would be somewhat as follows:—

Two brigades of the division are in advance, each keeps one regiment in first line; both these regiments would together cover a front of about 4 to 6 miles [$18\frac{1}{2}$ to $27\frac{1}{2}$ English miles], each observing about 2 or 3 miles [$9\frac{1}{2}$ to $13\frac{1}{2}$ English], and each keeping, according to the nature of the ground and other circumstances, two or three squadrons in first line, and following with the rest in compact order in rear of the centre. The advanced squadrons form their own advanced guard and keep up thorough connection within themselves and communication with each other; communication must also be kept up between the regiments following in rear. The 2nd regiment of each of the two advanced brigades follows the 1st regiment, in compact order, about half a mile [$2\frac{3}{4}$ English] in rear of the centre of it, and in rear of this second line at a distance of about 1 mile [$4\frac{1}{2}$ English] follows the 3rd brigade as reserve [or 3rd line; Treffen]. As already mentioned, a battery of horse artillery is usually attached to each of these brigades.

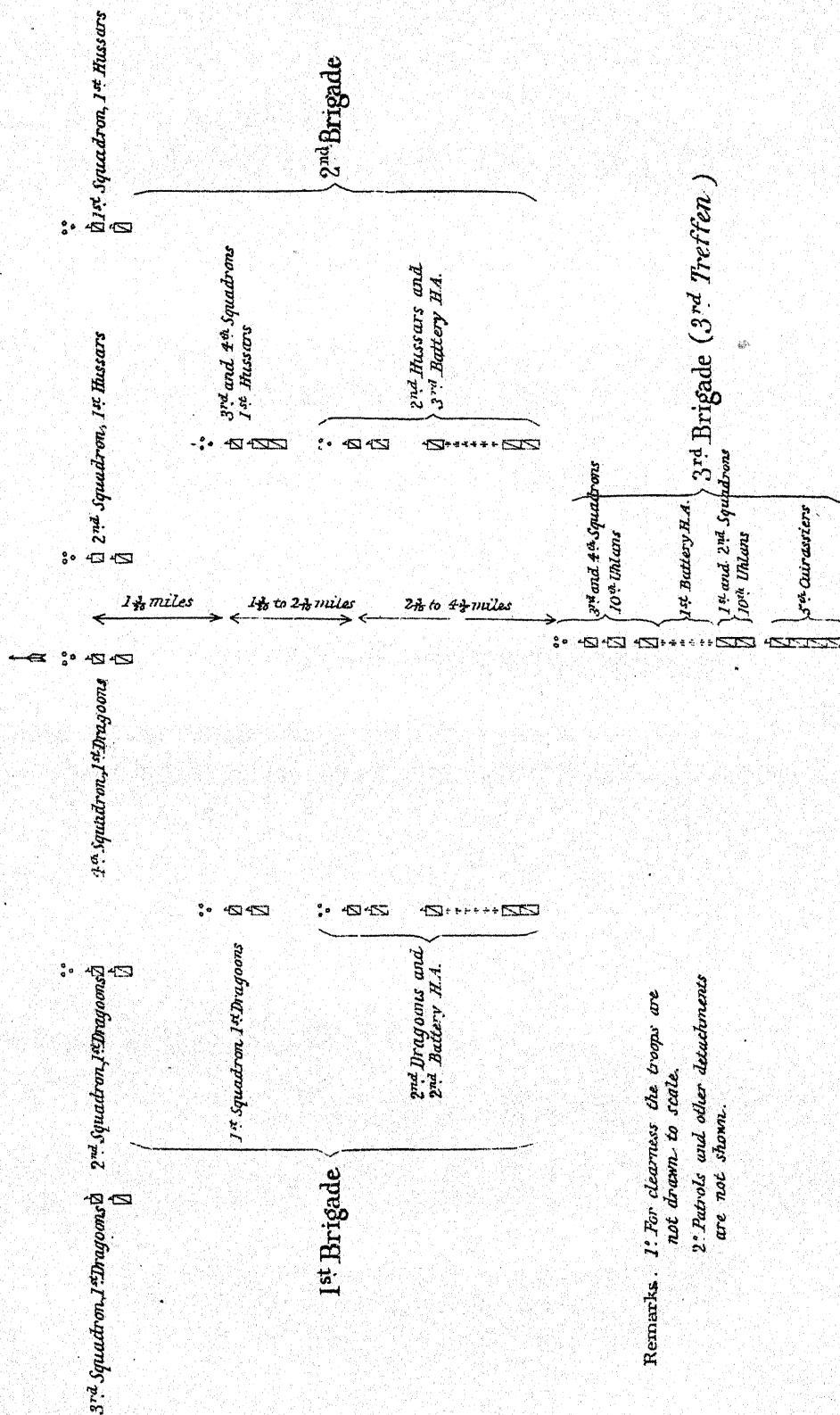
Such, in general terms, would be about the general disposition of a cavalry division on detached employment in advance of an army; as a matter of course, modifications would be required according to circumstances, such as the extent of front to be covered, the condition of ground, &c. It is merely given as a normal formation to obviate misunderstanding as to the general scheme (see Plan).

(7.) As the movements of the division will be regulated by those of the enemy, the distance it maintains from its own army will depend on the progress made by the two armies. As a rule it will be from two to three days' march.

The division will usually keep up connection with the head-

* The term "spitze" applies strictly to the "advanced party" of an advanced guard, but also corresponds with our "advanced scouts" in the regulation reconnoitring formation.—Tr.

TYPICAL FORMATION OF THE CAVALRY DIVISION PRECEDING AN ARMY



quarters by means of connecting posts [Relaisposten] or connecting patrols; the reports sent bearing consecutive numbers.

(8.) For the purpose of the actual reconnaissance, going round the enemy's flanks, or if necessary breaking through his line, in which officers' reconnaissance patrols will be employed, are the most effectual means of obtaining positive and reliable information regarding the enemy; information which may be of value to army headquarters for the direction of the operations in general, and not merely for objects of secondary importance.

(9.) Two main tasks are therefore laid before the cavalry division; these are—

a. To search the ground in front in all directions near and far.

b. To keep up constant connection between the different bodies, both on the march and when halted, and maintain communication with neighbouring troops.

The first task is fulfilled by employing officers' patrols which extend to considerable distances on the high roads, and small patrols* consisting of two or three men on the bye roads and to short distances.

The second duty will generally be entrusted to small patrols, and only exceptionally to officers.

Too much attention cannot be paid, nor can too much value be laid upon the constant inter-connection of the different bodies, and mutual communication of all that happens, all that is found out, seen and heard; these communications should generally be written, and in the fewest words; they must especially be made as soon as outposts have been established, the position of such posts being communicated at the same time.

(10.) As to the disposition of outposts, I cannot too strongly oppose the employment of a continuous chain of vedettes.

During the operations of war, where so much exertion is demanded of both man and horse, such an arrangement is not suitable, and the traditions of the service are quite opposed to it.

Continuous chains of vedettes were never placed by the advanced guard of the army of Silesia in 1813-4; and to employ them is to waste one's forces. It is only in the case of camps and sieges, as before Metz and Paris, that continuous chains of vedettes are justifiable. In the field it is sufficient to post piquets [Feldwachen] on the routes leading towards the enemy, and to watch the flanks either by resting them on impracticable ground or throwing them back. From these piquets non-commissioned officers' posts must be detached, so-called "Cossack posts," fixed patrols pushed far in advance and posted at junctions of roads or other important points. Only one man of such posts remains mounted, the rest are dismounted.

Here a distinction must be made, as to whether the enemy is retreating, perhaps before a blow received shortly before, or

* These may be considered to correspond with the "Advanced Scouts" detached from the officers' patrols in the British service.—TR.

stands fast and resists, or is advancing while we are retreating; these considerations will of course greatly influence the mode of placing the outposts. In the first case fewer non-commissioned officers' posts will be required; in the latter two cases more posts will be necessary, and the measures for securing safety must be much more complete. But we should never lose sight of the fact that the most carefully placed chain of posts or vedettes is but a very insufficient means of security, if a continual and well-regulated round of patrols is not also organised. Whence the rule to have as few posts as possible, but plenty of patrols; the latter not being too strong, say two or three men.

(11.) On the proximity of the enemy, his condition, dispositions and spirit of enterprise, will further depend whether it is admissible to allow the squadrons and regiments in first line to occupy billets or cantonments during the advance, or whether they ought to bivouac, as well as the other portions of the division. The measures to be taken in the first case for the security of the troops, will depend in the first line on the general situation of affairs; it will frequently be advisable to barricade the issues of cantonments in or immediately in rear of the line of outposts, especially of the former, whenever there are time and means to make the defence as complete as possible. A commander, therefore, on arriving in cantonments, must thoroughly reconnoitre the place with a view to its defence if necessary, carefully consider the measures that would have to be taken, point out to his men the positions they would have to take up to occupy the outlets leading towards the enemy, so that in a given case every one would know what to do on a given signal. It will often be best for cavalry, when in an exposed position and liable to be surprised, especially by night, to content itself with the defence of the cantonments occupied, and confine itself to large inclosures or massive buildings, leaving the horses in their stables. The carbines, however, will not remain with the horses, but always with the men, who must be billeted near their horses.

In this manner must cavalry act in order to preserve its independence and not be obliged to call constantly on infantry for help; since a cavalry which is incapable of defending itself under all circumstances in cantonments fails in fulfilling the conditions required of it.

(12.) When the enemy has once been felt, contact must never again be lost, unless orders to that effect are given. The division fastens on to the enemy and his different columns in such a way, that the points keep up unbroken touch of his front, while the officers' and other patrols hang on to his flanks where they have ample opportunities for observation. Superfluous parties should now be drawn in, and only such parallel and flank roads observed as from the nature of the case are likely to be used by the enemy. If a road or a zone of ground is to be permanently watched in this way, one or two officers' patrols would suffice; but a whole regiment or a whole line should never be employed.

(13.) Constant communication and rapid mutual support must be provided for by active rounds of patrols and proper organisation of the portions of the outposts in the different groups, and should be sufficient to prevent the enemy breaking through.

(14.) The division will thus be able both to learn betimes and to report every movement of the enemy, and also to oppose in force every attempt he may make to ward off our reconnaissances or make any for himself. Should the enemy break through, the normal relation would be at once re-established by offensive and defensive movements of the division to the front and flanks, or by means of suitable detachments.

(15.) If a portion of the line becomes engaged with the enemy, it will be advantageous to support it from the rear by the nearest bodies of troops, and at once to inform the other troops of the circumstance, at the same time directing them to advance resolutely and support it by acting against the flanks and rear of the enemy, and to observe as much as possible what is taking place there, which under all circumstances is the main object to be kept in view. If the enemy shows serious offensive intentions, it will be necessary for the attacked cavalry to retire, at the same time rapidly sending information to this effect to the Commander-in-Chief; the direction of the retreat will depend on the designs of the latter, but the retiring cavalry will as far as possible endeavour to draw the enemy after it in a false direction in order thereby to obtain favourable conditions for its own army. In order to act judiciously in such cases, a just appreciation of the state of affairs and a sound judgment as to what will be advantageous are necessary.

(16.) Actual fighting is only a means to the end, and is only to be preferred to manœuvring and making demonstrations when the hostile cavalry has too high an opinion of itself and tries to prevent our reconnaissances. The fight then comes under the rules for the tactics of lines as laid down in Part V of the new edition of the Cavalry Regulations, and Part IV of this compilation.

(17.) In case of brigades being detached for independent reconnaissance, they will conform generally to what has been stated above. If the number of the batteries apportioned to the division admits of it, a horse artillery battery would be attached to each such brigade during the time it is detached.

Concluding Remarks.

In the execution of similar missions the principles just laid down must be especially attended to, which are briefly these:—

(1.) Explore the country in front as far as possible by small patrols, which disappear from before the enemy and anon hang on to him again.

(2.) Keep the larger units, regiments and brigades, together on several roads not too far apart, so as to be able to concentrate as rapidly as possible.

(3.) Maintain a reserve by keeping back a brigade.

(4.) Keep up constant connection between the advanced guards and their following columns of route, as well as lateral communication, so that the division may rapidly concentrate in case of need.

The conduct of a cavalry division on detached employment, and similarly of individual brigades, when entrusted with independent missions, should be in accordance with these principles or the spirit of them.

It is in the nature of the case, that only guiding principles can be laid down; in this sort of employment absolute rules are out of place. So much the more desirable, therefore, is it to have acquired a certain routine method of performing these important duties, such as will ensure certainty in the result.

The service marches* executed by regiments during time of peace, and the field manoeuvres of two large bodies of cavalry against each other, afford the best opportunity for practising this.

CHAPTER 12.—DIRECTIONS FOR PEACE MANŒUVRES.

1. REMARKS ON THE INSTRUCTION OF CAVALRY OFFICERS IN RECONNAISSANCE.

The last campaign showed very prominently the necessity there is for the cavalry officer being familiar with every kind of reconnaissance, and brought home to us the need of a thorough course of instruction and constant practice of these duties; duties which are so important for our arm, but for which as a rule so little has hitherto been done. Indeed this is one of the most important tasks that can be proposed to cavalry, for the fate of the whole army frequently depends on the bold, trustworthy, intelligent, and thorough manner in which the reconnaissance has been executed.

The cavalry officer therefore cannot be too familiar with or be too highly instructed in this branch of his duty; to see well and accurately, to observe the ground always from a clear military point of view, to realise its capabilities in relation to the working of troops and to judge it accordingly.

The service marches of regiments, when proceeding from their garrisons to the exercise ground of the brigade or division, will provide the requisite opportunity for testing the efficiency of the junior officers in such duties as these; but it is desirable to give the subaltern officers special preparatory exercises, regimentally during the summer, in the reconnaissance of important sections of country in close proximity to their stations, the

* Marches as if in the actual presence of an enemy.—Tr.

ground selected being thoroughly worked out in relation to its adaptation to some specially indicated military purpose or operation, such as, for an advanced guard, the defence or attack of a passage, the tactical conditions of a position, for what arms the points of passage of a river are practicable, &c.; reconnaissances of ground with mere general objects, and no definite military operations in view, are of no use.

Still more instructive and useful is it to make officers reconnoitre bodies of troops posted out of view, the approach to which is prevented and whose strength and position are unknown; this will develop the intelligence and aptness of the officers, since they will have to avoid encountering the patrols of the force opposed to them, who will ward them off and prevent their getting a view of their position.

Of course the most important thing for officers is *practical* exercise in these operations, to develop in them sound judgment, aptness and routine; mere paper work being of much less value. A clear, plain, short, practical report, to the point, divided under a few heads on a report form [Meldekarte], in the margin or on the back of which, merely to make the report clearer and shorter, should be a sketch executed in the saddle and which need only claim to be correct and clear; such appears to be quite sufficient. The standard here should be the same as on service, omit nothing of importance, but leave out all superfluous details.

These exercises will not only be of great use in furthering the education of officers in this important branch of duty, but they will very soon show where practical ability and talent for undertakings of this sort are to be found, where is the sharp and correct eye and fitness for difficult missions on actual service.

I therefore recommend proceeding in this manner, and that particular attention should be paid to the instruction of officers in this important subject.

2. DIRECTIONS AND INSTRUCTIONS FOR THE PRACTICE OF SERVICE MARCHES IN TIME OF PEACE, FROM THE GARRISONS, OR DISTRICTS WHERE REGIMENTS ARE COLLECTED TOGETHER, TO THE EXERCISE GROUND OF THE CAVALRY BRIGADE OR DIVISION.*

a. The distribution of the period of manœuvre of the cavalry division in the neighbourhood of the manœuvring ground is communicated to the various regiments. The march from the different garrisons or cantonments to the cantonments indicated,

* Taken from the orders issued in 1873 and 1874 to the 7th Cavalry Brigade, and to the Division formed in the summer of 1875 from the regiments of the 1st and 2nd Army Corps; for the better understanding of which there will be found at the end of the work the General Idea, Special Orders, and March-table for each day, showing the daily situation of the outpost line, for the regiments of the 7th Brigade, as executed in 1873 when marching to the manœuvre ground of the cavalry division at Jessnitz and Raghun (Duchy of Anhalt).

will be executed in accordance with the March-table annexed. (Appendix C.)

b. During the march to the manœuvring ground regiments will take all the precautions for security, both on the move and when halted, that would be adopted on actual service, in accordance with the General Idea (Appendix A), which contains the general military situation, as supposed, and in conformity with a Special Idea for the two cavalry brigades* of the combined division, and special orders for each of the regiments. (Appendix B.)

c. The cavalry is thus employed exactly in the same manner as in July and August, 1870, when the 2nd Army advanced through the Palatinate and entered France with the 5th and 6th Cavalry Divisions, which moved independently two or three days' march in advance with the object of reconnoitring the country as far as possible, watching the enemy, finding out and observing his movements, and thence divining his intentions, destroying and interrupting his communications, and also preventing his observing the march of our columns, disturbing them, and interrupting our communications.

d. Two things have principally to be attended to :—

- (1.) To reconnoitre the country far and wide in all directions.
- (2.) To maintain uninterrupted communication between the advanced detachments, both on the march and when halted, and keep up connection with the nearest troops.

The first object is attained by officers' patrols on the main roads and to great distances, and also by small patrols on secondary roads and to shorter distances. The second condition is fulfilled by employing small communicating patrols of two or three men, and only exceptionally by officers' patrols.

e. The zones of operation for each regiment are limited by the cantonments assigned to them for each day in the March-table (Appendix C); the main directions, or main lines of operations, which must especially be secured and watched are gathered from the General Idea (Appendix A), and from the Special Orders for the two brigades and individual regiments (Appendix B).

f. According to the March-table (Appendix C) each regiment has four squadrons in 1st Line, one squadron with the regimental staff remaining in 2nd Line as a reserve to support the 1st Line in case of the enemy attempting to break through.

As only two regiments march in close connection with each other, the formation has not the necessary depth; since for the support of the eight squadrons of each brigade marching in

* The 1st Brigade consists of the 7th (Magdeburg) Cuirassiers, and 10th (Magdeburg) Hussars. The 2nd Brigade is composed of the 7th (Westphalian) Dragoons and 16th (Altmark) Uhlans. Of the 1st Brigade, the 7th Cuirassiers march from the vicinity of Halberstadt on the 8th August, and the 10th Hussars from the neighbourhood of Aschersleben on the 9th. Of the 2nd Brigade, the 7th Dragoons, leave Stendal on the 4th August, and the 16th Uhlans leave Gardlegen on the same date.

1st Line, which have the most important work to do, only two reserve squadrons are provided. In reality, during the advance of a cavalry division in front of an army, the arrangement would of course be different, and would accord with the disposition indicated in Chapter 2, Sect. 6, of this part. I draw special attention to this in order to prevent any misunderstanding regarding these service marches in time of peace, which naturally are regulated by other than the strategic considerations mentioned in the chapter just referred to, the application of which will be modified according to the object in view.

g. As the advance will be conducted as if on service, the marches must be executed as if in time of war, not only as regards the employment of advanced guards and flanking patrols, but with respect to the timing of the marches. The marches of individual squadrons are regulated in the March-table side by side. Squadrons march quite independently with their own advanced guards, and keep up constant connection within themselves during the march.

A different zug must form the advanced guard each day, and squadrons should march off in different order each day, thus a fresh zug should be at the head, and this should always be the case in common marches.

h. It is left to regiments to determine which squadrons shall march on parallel routes, but the arrangement once made at the beginning, the march of the different squadrons should be regulated according to the March-table, since it is drawn up for parallel marches; if therefore any deviation be made from the directions originally taken, the squadrons would cross each other, and thus not only would the marches be unnecessarily lengthened, but tactical principles would be infringed.

Regiments can replace a squadron by the one in reserve, or by one which is further in rear, but the marches must be regulated by the principles above laid down, and on no account must squadrons be allowed to cross each other, and the length of the marches be thus increased.

i. Just as a thorough and frequent communication must be kept up between the advanced squadrons, so must communication be established as soon as possible between the different regiments; thus, in the example,* communication should first be made between the left flank of the Uhlans and the right of the Dragoons, then between the right of the Cuirassiers and the left of the Hussars, and between the left of the Cuirassiers and the right of the Uhlans.

This communication must not only be maintained through the outposts, but must be kept up while on the move; as soon as rivers are passed, the squadrons must at once endeavour to re-establish communication with contiguous squadrons.

In the March-table (Appendix C) the bridge or other means

* Compare the March-table (Appendix C) and the outpost line there laid down for each day.

of passage of rivers for each squadron is pointed out,* and must be adhered to.

4. As to the marches themselves care should be taken not to make them too long, so that the squadrons (except the portions forming the outposts, which are changed daily) can reach their quarters in a few hours.

As a matter of course the hours for marching each day will be so regulated that all squadrons will move off from the outpost line at the same time, say about 7 A.M., so that mutual communication may be kept up, and the reconnaissance in advance may be pushed to the same extent.

With regard to the rate of march it is understood that the troops will alternately walk and trot. Under normal conditions of ground and weather the ordinary march of about 14 English miles would be divided as follows:—

German.	English.	
$\frac{1}{2}$ mile	4,048 yards.	Walk = 38 minutes.
Halt		= 5 "
$\frac{1}{4}$ mile	2,024 "	Trot = 9 "
$\frac{1}{4}$ "	2,024 "	Walk = 18 "
$\frac{1}{4}$ "	2,024 "	Trot = 9 "
$\frac{1}{4}$ "	2,024 "	Walk = 18 "
Halt, to dismount		= 20 "
$\frac{1}{4}$ mile	2,024 "	Trot = 9 "
$\frac{1}{4}$ "	2,024 "	Walk = 18 "
$\frac{1}{4}$ "	2,024 "	Trot = 9 "
$\frac{1}{4}$ "	2,024 "	Walk = 18 "
$\frac{1}{4}$ "	2,024 "	Trot = 9 "
$\frac{1}{4}$ "	2,024 "	Walk = 18 "
3 miles (German) 13 $\frac{1}{2}$ miles (English)		3 hrs. 18 "

The trot here should be somewhat slower than the trot of manoeuvre of 300 paces in the minute.

The men may be permitted and taught to trot in the English fashion (jockeying) to ease their horses during the march, but of course this can never be allowed during drill, or in the training of the horses; still individual men on orderly duty may trot in this manner.

I am far from laying down a fixed model for marches, for the form often destroys the idea, and exercises an unfavourable effect in nearly everything; here especially, where so many influences are in operation, particularly considerations of weather, ground, and obstacles of all sorts, a rigid adherence to fixed times or distances would evidently be mischievous; I have merely given an average form for such marches. Anyhow a march of about 14 miles (English) ought under ordinary circumstances to be easily accomplished in from 3 $\frac{1}{2}$ to 3 $\frac{3}{4}$ hours.

During the 20 minutes halt the horses' feet and the saddlery, &c., must be carefully examined. The men must dismount in such a manner that the sections, &c., and individual men have

* In the scheme proposed the passages are those of the Elbe and Saale from Tangermünde to Koswig and Klein Rosenberg to Rothenburg.

several paces distance [interval?] from each other, so that the air may freely circulate between the horses.

During this halt the points [advanced parties] and flanking patrols post themselves so as to act as vedettes.

l. From what has been said it results that the squadrons march separately, and are not united together in regiment, unless indeed special circumstances render it necessary; this would be decided by the regiment in question. But the regimental commanding officer must daily regulate the advanced guards and outposts; and as commanders of detached bodies, they must assure themselves that, owing to the establishment of a reliable and well-organised system of communication (*Ordonnanzdienst*—"service of orderlies"), their orders and instructions will be carried out, even by the most distant squadrons, in the shortest time.

These advanced guards and outposts will afford excellent opportunities for exercising the men in carrying out particular orders and executing certain missions, so necessary for the advancement of their military education.

m. It is understood that an advanced guard will be formed in the morning as soon as the squadrons pass the outposts, and that on the conclusion of the march the outposts will at once be formed by this advanced guard.

n. In accordance with the March-table those detachments of each squadron will be detailed regimentally which have to perform the outpost duties each day, in case of one or other of the squadrons occupying several cantonments, or being far from the outpost line prescribed in the table; as a rule the cantonments nearest to the outpost line will naturally furnish outposts and arrange for the service of security, reconnoitring, keeping up communication and connection.

If several cantonments lie near together and at equal distances from the prescribed outpost line, this must be done by all whenever important lines of communication lead in the direction of the enemy and ought to be observed.

The cantonments in 1st line on the line of outposts are to be considered as on actual war-footing from 6 A.M., or time of marching in, till 7 P.M., except on days of rest; the issues of the cantonments will be considered barricaded, and this fact should be announced in regimental orders.

o. In the daily outpost line mentioned in the March-table (Appendix C) an uninterrupted chain is not to be understood; only march outposts are intended, as distinguished from camp outposts. Each squadron furnishes a piquet [*Feldwache*] of the strength of one zug, commanded by an officer, and this will be taken from the cantonment nearest to the outpost line or from more such cantonments; this piquet throws out the necessary posts,* and keeps up communication with the piquets and posts of neighbouring squadrons.

* Intermediate posts which supply vedettes.—Tr.

As already stated, main roads, cross roads, important and elevated points, must be occupied by detached non-commissioned officers' posts (Cossack posts), of which only one man is mounted. This mode of proceeding is far preferable to posting vedettes.

It cannot be too often repeated that safety is best secured by the organisation of frequent rounds of patrols, who move both in the direction of the enemy and towards the posts of contiguous squadrons, as is always done in real operations. Generally too many vedettes are posted instead of utilising our resources for the much more important service of patrolling.

p. The extreme flanks should be somewhat thrown back, so as to cover the flanks; thus in the advance of the two northern regiments (Appendix C), the right flank of the Uhlans and the left of the Dragoons should be thrown back, and in the march of the two western regiments the left of the Cuirassiers and the right of the Hussars, from the time of their joining each other until they form one line with the northern regiments; when the latter junction has taken place only the right of the Hussars and the left of the Dragoons will be thrown back.

Where impassable or difficult country occurs on the flanks it will be utilised to cover the flanks; but roads and woods, unless the latter are not very thick, can never serve to rest the flanks on.

q. The squadrons and cantonments adjoining rivers should occupy the borders of their valleys,* so that the valleys may be observed; when there are no bridges this is the only way of maintaining communication with the outposts on the other bank of the river, as it could not be kept up by ferries.

r. In long-continued rainy weather the piquets and detached non-commissioned officers' posts, except the look-out men, may be put under shelter in the barns, &c., in farm buildings, but the horses must not be unsaddled.

s. The outposts remain posted from the time of marching in till 7 P.M.: they must be posted again at 6 A.M., and the rounds of patrols must have begun by that hour. On days of rest out-post duty will be suspended. Officers commanding regiments and squadrons will exercise the requisite supervision over the outposts.

t. Officers commanding regiments will give special orders to the officers entrusted with the leading of the officers' patrols detached to reconnoitre the ground in front; these must especially keep in view the conditions bearing on the advance, and reconnoitre the ground from a purely military point of view.

They will draw up a very short report of the result of their reconnaissance, and will attach to it a plain and clear sketch of the position, made in the saddle.

u. The squadrons must report to the regiment (headquarters) all the events of the march, indicating briefly the measures

* This refers to the valleys of the Elbe and Saale.

taken for their security, the mode in which they have placed their outposts, whether they have established communication with the neighbouring outposts, and if so with which, what reconnaissances have been made in advance, the direction in which they were made, and what was the result of them. The results gained by the officers' patrols are to be added to these reports.

v. Both squadrons and regiments will keep an exact journal of the whole advanced guard and outpost duty, from which will be seen which squadrons have performed the latter duty, how many piquets have been placed, where they were posted, what posts they threw out, how the patrol duty was organised, with which squadrons communication was established, and at what hour, &c.

w. The necessary billeting party can, as in time of peace, be sent on in advance.

x. Lastly, I remark that cultivated ground must of course be respected during these practice marches.

y. All other detailed orders and special instructions will be given by regimental commanders in conformity with the spirit of the foregoing directions.

3. CONCLUDING REMARKS.

In the preceding pages those points have been indicated which must especially be attended to if we would turn these exercises to the best account, both as regards leaders and men; it only remains to call attention once more to the principles for conducting these operations in time of war, contained in Chapter 11 of this part, where the object of the exercises and the principles regulating them are laid down.

PART V.—DISMOUNTED SERVICE.

CHAPTER 1.—GENERAL REMARKS.

THE mode of employing cavalry, as practised during the last campaign, requires that it should be more independent of the other arms. This cannot but be a source of satisfaction to our arm, as a much wider field for activity is thus opened out to it, and its degradation to the position of an auxiliary arm is rendered impossible. Incessant activity, independence of action, and spirit of enterprise, these are its life elements; on these alone does it subsist.

But the experiences of the last campaign have proved irrefutably that it is indispensably necessary that cavalry should, to a certain extent, be able to fight on foot, if it would be prepared to fulfil all the tasks which, without demanding too much from it, will in certain situations fall to its lot in the field.

Although during the last campaign, abnormal circumstances required that cavalry, in order to fulfil the task entrusted to it, should dismount and exchange the sabre for the carbine more frequently perhaps than will hereafter be necessary, yet similar circumstances will arise in future wars and render the same mode of action necessary, especially when hostile cavalry divisions endeavour to prevent our screening and reconnoitring operations by occupying defiles and localities with dismounted men. If in such cases the cavalry had to call upon infantry, it would suicidally degrade itself to the rank of a secondary arm, and surrender the last vestige of its independence. However important the services that might in certain cases be rendered by battalions of infantry being attached to cavalry divisions, such a procedure would in the further course of operations be very prejudicial to the cavalry; the infantry would be like a leaden weight attached to its feet, destroying its mobility and rapidity of movement, in which the whole power of the arm resides.

The increased independence of cavalry, however, imposes certain fresh duties upon it, by the conscientious performance of which alone it can fulfil the various missions which may fall to it under different conditions of ground. Through its ability in this respect it will under all circumstances gain enormously in independence and self-confidence, as well as in usefulness.

When owing to circumstances of ground, or to the enemy's occupation of localities and defiles, it is not possible for cavalry to attain its object on horseback, when it is very difficult to turn such places, when nothing can be hoped from mounted action, and there is no infantry on the spot, nothing remains to cavalry

but to dismount, to open the way by an attack with carbines on foot so as to gain its object.

It was in this way that in the last campaign the cavalry combats on foot arose. In future wars similar combats will necessarily occur, when we shall make the same use of our cavalry as before, sending it on independently several days' march in advance of the army; but they will probably be much more frequent, as the enemy will not fail to oppose us with its cavalry divisions, and these, in accordance with the marked propensity of the French cavalry to use firearms, will endeavour to stop our advance at passages, defiles, &c. This is all the more likely to occur, as all their cavalry regiments are armed with a good long-range weapon, and in greater numbers than is the case with us at yet.

It is then the least that can be required of us, that we should be in a position to overcome the opposition of this dismounted cavalry. Moreover, weak infantry detachments should not be able to say to us, "*So far you may come, but no further.*" In the next place we must of course be able to provide for the security of our cantonments, and to defend them against attack; we must also be able to occupy rapidly with dismounted men any important and distant points, and to hold them against the enemy until our infantry can arrive.

In acting thus we shall not become mere mounted infantry, which is the last thing we could wish to be; we have no desire to fill the rôle of infantry. All that is demanded is limited to the above-mentioned cases; but even this would greatly extend our usefulness, would open an immense field for our action, and allow us to render increased services in the matter of screening and reconnoitring duties. Numberless examples of this have occurred in both ancient and recent military history, particularly in that of the Seven Years' War, the most glorious period of our cavalry. In this way there will be an enormous development of that desire to take the initiative, that love of enterprise and longing for personal distinction, which should animate us as cavalry soldiers, which alone we wish to be.

It is not our place to stand fast under fire in positions under cover; our object must be to approach the enemy and dislodge him. To this end every cavalry soldier must be thoroughly trained in the use of his carbine, and in fighting on foot in dispersed order, taking the fullest advantage of the ground and the cover it affords; officers and non-commissioned officers should be so far acquainted with the elements of infantry tactics as to be able to direct the fight, offensive and defensive, of an independent company or detached battalion; this is required by the exigencies of minor warfare, which especially brings out the ingenuity and adroitness of individual men and the talent of leaders of small detachments.

The following then are the things most required of us:—

1. More thorough training in the use of the carbine than hitherto, for this duty has been very much put in the back-

(I. C.)

ground, instead of being developed like every other one for the higher instruction of the men and the advantage of the Royal Service. An increased expenditure of time over this duty is not necessary; provided only that the musketry instruction is thoroughly carried out with real interest and intelligence, and in accordance with the excellent regulations on this head, good results cannot fail to ensue.

2. More extended instruction in dismounted service and in taking full advantage of the accidents of ground. Since the last war many military writers have justly reproached us with the fact that we did not know how to use our carbines or to fight on foot. We cannot conceal from ourselves that in the last campaign we appeared on the field totally unprepared in this respect, and the partial successes we gained were due merely to the want of cohesion in the newly-formed troops of the enemy and the acknowledged bravery of our regiments, but not to the instruction they had received.

We must then make better use of peace time, prepare ourselves more thoroughly and systematically for the tasks which will fall to us, and accustom our men, by means of the necessary exercises, to the idea that under particular circumstances they will have to fight the enemy on foot; it will then be no surprise to them to have to do it in actual war. We should always bear in mind that only that which has become a matter of habit and second nature on the drill ground should be put into execution before the enemy, as it alone can have any hope of success.

It cannot too often be repeated that the main thing is to carry out the mission in hand *at any price*; if possible this should be done mounted and with the *arme blanche*, but should that not be feasible, then we must dismount and force a road with the carbine. Whether it is a task imposed by authority or undertaken on one's own account, the object must be attained under any circumstances; it is only by acting thus, and not by shrinking from a mission that one has proposed to oneself, or been ordered to accomplish, that the spirit can be stimulated.

I am convinced that cavalry would not be up to the requirements of the day if we were not able under certain circumstances to fight on foot, nor would it be worth the sacrifices that it costs the State. Independent and successful action of cavalry divisions is not conceivable unless such cavalry is capable of maintaining a combat with firearms, offensive and defensive, by whole regiments, either for the attack of localities or for the defence of their cantonments.

All our efforts should tend to bring us as nearly as possible on a level with that period of cavalry history when it had attained a point of efficiency and an *éclat* that has not yet been again reached. The drill regulations of Frederic the Great for his cavalry required not only that they should be capable of holding positions and villages against an enemy, but that they should be able to attack and master such places as churchyards, &c., and the mode of procedure to be adopted is also laid down.

In this glorious period, however, cavalry lost nothing of its true spirit; they did not forget to charge with the *arme blanche*, although they had much more training in fighting on foot than now-a-days, and had very frequently to obtain their successes by fighting in that manner.

CHAPTER 2.—DIRECTIONS FOR THE INSTRUCTION IN TARGET PRACTICE AND FIELD FIRING PREPARATORY TO DISMOUNTED SERVICE.

a. INTRODUCTION.

Our principal weapon is of course the horse, and a carbine shot on horseback can only be of use as a signal when there is danger in delay; we cannot allow ourselves to engage in a fight with firearms where the ground admits of our acting on horseback.

If this is not the case, and tasks are confided to us which must positively be accomplished under any circumstances, by whatever means or expenditure of force, nothing remains but to accomplish it on foot; we must therefore not reach the battle field unprepared for this.

Accordingly we must have the men well trained in the use of the carbine, and instructed in practically taking advantage of the ground, as marksmen, both for the attack and defence of localities.

b. TARGET PRACTICE.*

We must start with the principle that the preparatory exercises are really of the greatest importance. These have reference to the correct position, proper regulation mode of taking aim, raising the foresight from below upwards, and holding the carbine straight forward, pulling the trigger gradually and smoothly, remaining in position after the shot has been fired, and keeping the eyes fixed on the spot, so as to acquire the necessary calm.

A good marksman can only be formed by frequent practice of these exercises on the drill ground and in quarters, but not by practice in firing at the butts, where only as much instruction as is necessary should be given, so as not to harass the men; by proceeding thus they will always shoot well at the butts.

The most common faults in these exercises are that the position and mode of aiming are incorrect, the carbine is often turned during the aim, the aim is not taken from below upwards, the trigger is pulled with a jerk which displaces the carbine, and the men do not remain in the aiming position after firing.

* Some unimportant omissions have been made in the translation of this section.
—Tr.

The very best means of teaching the men to aim correctly is for the instructor to make them repeatedly aim at his eye with the unloaded weapon.

It should be laid down as a principle that no man should fire more than four bullets a day, and that any one who misses twice consecutively should fire no more on that day, and should be put through all the preparatory exercises before again going to the butts.

c. THE PRACTICE OF FIELD FIRING AS A PREPARATION FOR DISMOUNTED SERVICE.

When the men have learnt to handle their weapons and gone through target practice, it is advisable, when circumstances permit, to practise firing in the field, especially on broken ground; this will be done at first with blank cartridge, and afterwards with ball, the men advancing against cavalry targets at unknown distances up to 600 metres.

These exercises should be in accordance with some tactical scheme, and the men in the shooting line should start from a certain distance and advance by rushes, taking full advantage of the ground, so as to obtain all the cover possible, until within about 100 metres of the enemy. The men will, according to the ground and cover, fire either kneeling or lying. Each man will receive a certain number of blank cartridges, of which he will fire one at each of certain positions to be pointed out by the instructor during the advance, the distances being, for example, 600, 400, 300, 200, and 100 metres from the targets.

Care must always be taken to have a support, and to reinforce the shooting line from it. This reinforcement will never be made by doubling the files of the original shooting line; but a group under a non-commissioned officer will be pushed forward to an important and unoccupied point, or to prolong the shooting line, so as to outflank the supposed enemy, or to fill up gaps in the shooting line. When ball is used care must be taken to avoid accidents by choosing suitable ground, and employing mounted men to keep the ground.

These exercises are of the greatest possible use in preparing the way for dismounted combat. It should not seem to be anything out of the common when the necessity arises, on actual service, for fighting on foot; indeed if it is allowed to come as a surprise, the result will be endangered and useless sacrifices will occur, and these might have been avoided if the men had been properly trained and accustomed to the work.

CHAPTER 3.—DIRECTIONS FOR TRAINING THE MEN FOR DISMOUNTED COMBAT, AND GUIDING PRINCIPLES FOR THE CONDUCT OF SUCH OPERATIONS.

a. GENERAL CONSIDERATIONS.

In the instruction in dismounted combat it is above everything important to keep in mind the characteristic conditions under which this mode of employing cavalry could be required.

Whatever is done must be done quickly; we cannot allow ourselves to be drawn into long, slowly-sustained, and obstinate fire-combats; for the reasons previously stated we have only to do with the attack or defence of particular localities, or a combat with carbines on broken ground, and our measures must be regulated accordingly. We must act with decision from the first, and as many carbines as possible must be brought into play from the commencement: but still it is necessary to leave a support in the leader's hand, with which to reinforce the fire at particular points.

In order to facilitate the command of the dismounted men and the direction of the fire in broken ground, the distribution in groups must be observed; advancing by rushes at the double from temporary cover, in zugs or squadrons, turning the objects to be taken from several sides, these are the principal modes of proceeding that come into use.

From the above may be gathered what points are particularly to be kept in mind in the instruction for dismounted combat.

The cavalry soldier should be able to fight* on foot in small or large groups, to avail himself of the advantages offered by the ground, surmount the obstacles it presents, husband his ammunition, employ rapid fire at suitable times only, observing the strictest fire discipline, gain ground by rushes, firing right up to the enemy, maintain his position with tenacity by making well-timed use of his supports, or gain a position by making bold attacks, well backed up by the support, and then holding it obstinately, and with every precaution taken.

A third line of dismounted men as main body is not requisite; its duties, those of giving the necessary moral support to the men under fire and warding off a catastrophe, are performed by the men who remain mounted, whether a zug, squadron, or whole regiment, these also protecting the horses of the dismounted men. Only a portion of the whole will be dismounted, as firing line and support, while the rest (besides the men holding the horses) remain mounted, so as to pursue the enemy or disengage the dismounted men.

As a rule the principle must be observed of not employing more men on foot than are necessary.

* *Tirailleurs*.—The word "*skirmish*" is avoided in deference to the British Cavalry Regulations.—Tr.

Of one detached squadron one zug will often be all that need be dismounted, and at least one zug must remain intact and mounted. In the case of a regiment, at least one entire squadron must remain intact as reserve. When working in larger masses a whole regiment may be employed on foot.

If the instructions hitherto given for dismounted service have been considered as too meagre, possibly the contrary reproach might be cast upon my directions; some might say that too much is required, too many formal rules are given which could only be acted on in the drill ground. Indeed some might go so far as to maintain that all regulations for cavalry combat on foot are superfluous, as we have only to dismount before the enemy to attain what we want. Nothing of the sort; by acting thus we should be led into grievous errors, for it would be opposed to the first principles of military instruction and to the experiences of the last campaign.

* * * * *

I am convinced that a complete and sufficient instruction can be given to cavalry soldiers in dismounted service without the slightest prejudice to their training as horsemen, which of course is the most important thing, and without the slightest injury to the other branches of duty, gymnastics, leaping, use of their arms, theoretic instruction, &c., which are so requisite, if we only bear in mind the matters which are absolutely necessary for real service. These may be summed up as follows:—

1. Thorough instruction in the use of the carbine, position, aiming, &c.
2. The most rapid formation for dismounted combat, distribution by zugs and groups, ability to mount and form as quickly as possible, so as to use the *arme blanche*.
3. Skilfulness in taking advantage of the ground in the attack and defence of localities, defiles, villages, borders of woods, &c., and in broken ground.
4. Judicious leading of the zugs and groups by officers and non-commissioned officers in dispersed order, and maintenance of a good fire-discipline.

b. FORMATION FOR DISMOUNTED SERVICE.*

Whenever possible the formation for dismounted combat should take place at a point near where the led horses remain under cover.

The dismounting and forming up must be done as rapidly as possible, and similarly the mounting again when the foot combat is over, so as to be ready to act again as cavalry.

As the sword is a great hindrance to the dismounted man in broken ground, it should be unbuckled and hung on the saddle

* A précis of this section is given, as the German mode of formation will be interesting to the British officer.—Tr.

by the part of the waist belt between the two slings. It is thus not in the way, and will not be lost if the led horses are moved; moreover the men can easily take their blades on remounting without buckling on their sword belts.

When the men have thus prepared themselves as quickly as possible, the leader gives the command "— Zug (or squadron), *for dismounted service, prepare to dismount*," "*Dismount*;" when the men form as in the Regulations, Part II, § 11, all the men of the rear rank dismount with carbines, and all those of the front rank who are told off as No. 1 for dismounting. Those of the front rank who are told off as No. 2 for dismounting remain mounted, and take over on their right arm the bridoon rein of the front rank No. 1 on their right, who turns his horse left about; front rank No. 1 also takes round his right arm and in his right hand the bridoon reins of the horses of Nos. 1 and 2 rear rank, which are fastened together, and brought to him by No. 1. This mode of leading the horses has been shown to be better than that hitherto prescribed by the Regulations, as No. 2 front rank thus has his bridle hand free, and can lead all the horses better on one side than when they are on both sides. The dismounted men form 12 paces in two ranks in front of the centre of the squadron, keeping as nearly as possible the same places as when mounted; when more than two zugs are dismounted they form in two equal zugs one behind the other at six paces distance. The commander of the dismounted men has a trumpeter with him.

For each zug there should, if possible, be one officer as leader, and there should be one common commander for two zugs; to each zug there should also be told off a trumpeter, and at least three non-commissioned officers. When two squadrons are dismounted the major commands, when three the regimental commanding officer.

The zugs are divided into groups of three to five files, or if only one zug is dismounted it is told off in two or four groups, each led by a non-commissioned officer.

If the men dismount when in zug column the zugs forming the shooting line form parallel with the leading zug.

c. EXTENSION OF THE FIRING LINE.

On the command "*Extend*" (*Schwärmen*), or the sound "*Skirmishers out*," the left half of the zug (or, if there be two zugs for dismounted work, the whole of the leading zug) extends, the men inclining right and left until the line to be occupied is reached, or the signal "*Halt*" is given. If several squadrons are dismounted the two zugs of one squadron can extend at the same time, while those of the others act as support (see *q*). In this case care must be taken that each zug is kept together, to which end one should incline to the right and the other to the left in extending, and similarly when several squadrons extend at the same time.

The two men who form a file on foot mutually support each other, and must under all circumstances keep together, either side by side or one behind the other, intervals between files depending on the ground. In clear and level ground files should not be more than six paces apart, and must keep in communication with each other, while in woody or broken ground any uniform interval will be impossible; but in no case may communication be lost, or contiguous files lose sight of each other.

For the better control of their leader the men of a group keep together as a firing group; in open ground a few paces interval will be kept between firing groups, so that the non-commissioned officers in charge may have them sufficiently in hand. The latter cannot be restricted to any particular position, but betake themselves to any point where their presence is required.

As a rule, especially when not on the move, the men of the shooting line should avail themselves of all the accidents of ground that will enable them to use their weapons with advantage and give them cover. Zug-leaders and trumpeters, when the whole zug is not extended, remain with that portion which is in close formation.

No more men should be extended for firing than the nature of the ground and the strength of the enemy require, unless we wish to decide the matter very rapidly, as will often be the case in cavalry combats on foot. But a firing line is well posted when not only each man takes the greatest possible advantage of the ground, but when all advantageous points are occupied from which effective fire results can be obtained, and the intervals which are not at all or but weakly defended lie within the effective, and if possible cross, fire of the other points. In the case of long lines whose flanks are not protected by natural obstacles, a few men under an intelligent leader should be sent out to the flanks to watch them, or some small bodies should be placed as echelons in rear of the wings to protect the flanks.

In open ground the shooting line should not attempt to keep the general direction too strictly, so as to lose the slightest advantage that the ground may give. In close country each officer must keep his zug together and in hand as much as possible, and direct it according to circumstances, taking as well as he can the general direction of the whole without losing contact.

d. FIRING IN THE LINE.

Every man must be able to load and fire lying, sitting, and kneeling, and should know how to take advantage of every object for aiming and resting his carbine. He should also judge distances correctly, and sight accordingly. Both officers and non-commissioned officers must be well skilled in handling the carbine, so that when the circumstances of the fight permit

they will be able to take a trial shot, and thus regulate the distances. The two men who form a file work together, so that one has, as a rule, loaded when the other fires. In broken ground, a wood, village, &c., this secures them from surprise, and this alternate firing should be strictly maintained. Of course each man loads immediately after firing. A shooting line fires as little as possible while on the move, and as a rule only when an attack of the enemy has to be warded off. Should it be necessary to keep up the fire while moving, particular men will be indicated by the group-leaders or officers to continue to fire; this will especially be the case when the object is large and easily hit, or other special considerations require it. When firing advancing, the man who is going to fire will always be in front of his comrade. During a retirement the man who is about to fire will be nearest to the enemy, and after firing will pass his comrade and load. When a shooting line is moving by the incline the men about to fire move a few paces sideways towards the enemy before firing.

Fire must not be opened at too great distances, so as not to waste ammunition, and the men should endeavour rather to shoot well than to shoot rapidly. Individual men should not be fired upon at a greater distance than 300 paces, nor larger objects, such as columns or artillery, at more than 600 paces. A man should never fire unless he has reasonable expectation of hitting, and preferably he should aim at officers, and at plainly visible, even if somewhat distant, compact bodies of the enemy; when artillery is the object, the fire should be directed principally upon the gun detachments, or, if on the move, upon the horses.

The signal "*Commence Firing*" means that the men are to fire calmly, and with good aim. If, as an exceptional case, rapid fire is required, each man firing as rapidly as he can, while nevertheless taking good aim, this will be specially ordered, or will be indicated by repeating the signal "*Commence Firing*" in quick succession.

If the firing line is halted, or has no cover from the ground, the men must always lie down.

For supplying the ammunition and bringing it up from the reserve, a few men should be told off and furnished with bags or other means of carrying it.

e. MOVEMENTS OF A FIRING LINE.

Attack.

The movements of individual men in the firing line must be free and unrestricted; as a rule they will move at a rapid quick march, and only exceptionally will they double.

The men must be carefully trained, and have pointed out to them how single trees, hedges, ditches, walls, and other objects, and even slight irregularities of ground, will serve to give them cover from the enemy, providing a rest for their carbine, and

enabling them to aim well and to load again while lying, kneeling, or standing under cover. They should also have pointed out to them the advantages offered by the ground for covering themselves from the enemy's fire, even while in movement. But this seeking for cover should never be pushed to the extent of causing them to forget the first object of every combat, the defeat of the enemy; and the men must take great care not to get in the line of fire of their neighbours.

Instructions in this can best be given by opposing very small detachments to each other. Next to the development of their bodily activity, the judgment and intelligence of the men must in this way be awakened.

As a rule the movements of a firing line will be confined to merely advancing and retiring, in both of which order and cohesion must especially be preserved, together with maintenance of the proper direction, the latter being ensured by the leader pointing out conspicuous objects on the ground. When moving under the enemy's fire, the fullest advantage should be taken of the ground, so as to approach the enemy unperceived and under cover.

Changes of direction are best made by the leader pointing out a particular object, feeling or intervals between groups and files being taken from the centre. The advance is made either at the quick march, keeping up a regular fire, or at the double; but in passing from one place to another over an open plain under fire, rapidity of movement is necessary.

If a firing line cannot get near the enemy except by crossing perfectly open ground, and circumstances do not permit one to take him in flank while he is only occupied in front, a long fire-combat must be avoided, and an attempt must be made to dislodge the enemy by reinforcing the firing line as much as possible, and making a rapid rush.

If the enemy's position has to be seized, the firing line must advance rapidly and surely, and by preference in rushes, the men alternately lying down, firing, springing forward again (at the command of the officer), and so on; the chief body, either several groups or a whole zug, according to the strength of the firing line, keeping up a brisk fire at the halt, while the rest are rushing rapidly forward to the next cover. When arrived at a suitable distance from the enemy, the whole, shouting "hurrah," will make a rapid rush, as concentric as possible, on the position. The attack will always be of the nature of a swarm attack, and it will be the object of previous instruction to familiarise the men to passing from the formation of the firing line to that of the swarm attack, and from this to a compact formation, which latter will often have to be assumed rapidly on taking the enemy's position, in order to meet his supports. An attack pushed right up to the enemy with determination will always succeed.

If the enemy is turned out of his position, individual men cannot be allowed to rush after him, but they must wait for orders, and in the meanwhile fire after him.

If one has succeeded in gaining the hither border of a locality, as of a village or plantation, the firing line must at once endeavour to gain possession of the opposite side; but they must not pass beyond the latter without distinct orders, merely contenting themselves with following up the enemy with a brisk fire.

During all movements the dismounted men must never cease to pay attention to the orders and signals of the officer or non-commissioned officer in command.

Officers may use a small whistle merely in order to call the attention of the men to them, when, at particular moments of the fight, they wish to indicate any movement by a sign, or by calling to them; but the using of any conventional whistle sounds for particular movements should be strictly forbidden.

f. REINFORCING, PROLONGING, AND DIMINISHING A FIRING LINE.

Defence.

If the reinforcement of a party engaged in a fire-combat should be necessary, it should always be effected by groups, who, as a rule, should prolong the firing line, so as to outflank and turn the enemy, which is far more effective than adding to the fire in front; moreover, the immediate reinforcement of a firing line, by pushing in a fresh section or doubling the files, is not advantageous, as it causes men of different sections to be mixed up, makes their command more difficult, and diminishes the direct influence of their usual leaders. Still, when the ground or other circumstances render it necessary, the firing line may have to be reinforced by pushing in groups, in which case the non-commissioned officers in charge must take care that the groups under them keep near together, so that they may not lose control over them.

In order to preserve unity of command, both in reinforcing and diminishing the firing line, the principle should be maintained of not dividing the original zugs and groups more than is absolutely necessary, at any rate they should not be mixed together.

On the command or signal "*Extend*" (*Schwärmen*), if the support consists of several groups, the left flank group should move out in the intended direction at a quick pace, or at the double if the firing line is on the move; or if the officer in command wishes to avoid repeating too often the sound "*Extend*," he can previously regulate the strength of the reinforcing party. The men should have been trained in the mode of reinforcing the line, groups entering between groups, or files between files.

In diminishing the line the particular section which is to retire must be designated, and they will rally, without doubling, in rear of the support. The gaps will then be filled up as far as possible by the men who remain in front.

In conducting a defence, the determination should be plainly

shown of not quitting the position. Each man lies down and fires calmly, and, when the enemy attacks, as rapidly as he can. Here again it is far preferable to prolong the firing line, to take up position on the enemy's flank, or to reinforce the principal points in the line, which appear most important for the defence, than to strengthen the whole line.

A retiring firing line should not be supported directly by a fresh line behind them, but should be covered and reinforced by a new line, which will occupy a position to the right or left rear.

If a locality has to be held for a considerable time, as for instance a cantonment, or if there is time to prepare a position, it is advisable for the better defence of the place, especially where there is an absence of cover, to throw up trenches, the necessary tools for which may be obtained without difficulty from the nearest dwelling-houses.

g. THE SUPPORT.

When only one zug is formed for dismounted combat, the right half of it forms the support; if two zugs, the second forms the support. When several squadrons are dismounted, unless one whole squadron or more be extended and several kept together as support, a number of supporting bodies will be told off, which the commander can, according to his judgment, unite in rear of the centre or of one or both flanks, as may seem best.

The duty of the support is eventually to reinforce the firing line, to give them firm support, to receive them in case of retreat, and form a point on which they can rally, or in case of an attack to throw their weight on the point where the best effect is likely to be obtained. Attacks once begun must be carried out with the utmost vigour, for an attack that is repulsed or broken off with the intention of renewing it is always attended with great loss to the retreating men.

While covered from the fire of the enemy, which will be best effected by kneeling or lying down, the support should always follow up the firing line so closely, and so conform to its movements, that it may always be in a position to support it without delay; on the drill ground the distance should be about 150 paces.

When in the case of large bodies all the disposable groups and zugs have been expended in reinforcing the firing line, there must still remain at least one compact group in rear of the centre or of one of the wings. As a rule only individual groups, and not the whole support, will be expended in reinforcing or supporting the firing line.

It is advisable to attach two or three mounted orderlies to the support, who can take any necessary reports to the rear, and keep up constant connection with the reserve.

Other instructions for supports are to be found in Part I, Chapter 2, of the Cavalry Regulations.

h. THE RALLY.

When there is no further occasion for the dismounted men, they will be rallied under cover of the mounted men; in the case of several squadrons this will be done on the sound "*Appell*," or, if a whole squadron only is to be withdrawn from the firing line, by the "*Squadron call*." On this signal the firing line and support concerned run at once to their horses, which will be brought towards them if the cover afforded by the ground permits.

i. DUTIES OF OFFICERS AND NON-COMMISSIONED OFFICERS.

The efficiency of a squadron in dismounted service will chiefly depend upon the officers and non-commissioned officers, theiradroitness and their clear understanding of the principles regulating dismounted combat.

Leaders of zugs and groups must never allow their commands to get out of hand, and must especially direct their fire. They point out the distances and direction of fire, taking care on the one hand, that the men aim coolly, do not open fire at too great distances, and do not waste their ammunition, while at the same time they mark the particular moments, and point out objects which call for increased fire. Group and zug-leaders direct the movements of their commands from the front, but remain in rear to regulate the fire. In doing this they will, according to circumstances, call out to the men, or use the whistle (see p. 197), or signal to them by the hand or sword. Trumpet sounds should seldom be used, and the trumpeter should be chiefly employed in taking orders.

In the attack, leaders must constantly endeavour by taking advantage of the circumstances of the ground to bring the firing line, or a part of it, nearer and nearer to the enemy, to surround and take the latter in flank, to profit by every mistake he may make, and, whenever possible, to facilitate an unexpected and sudden attack by the concentration and increase of the fire directed upon a particular part of his position, by which the enemy's force will be broken. When any place, such as a farm or village, has been taken, leaders must take care that it is strongly occupied by certain groups or zugs, so that any counter-attacks of the enemy may be successfully repulsed; and only those troops which have not been selected to occupy the place will follow up the enemy. In the defence they will occupy the different points and spaces in their line more or less strongly according to their importance, endeavouring as always to take the greatest advantage of the configuration of the ground. They must also take care that the extended men advance or retire quietly, and observe the strictest silence and attention; they will also observe that the common bond of union is never lost, without, however, too anxiously insisting on alignment and feeling.

K. GENERAL PRINCIPLES FOR THE CONDUCT OF COMBATS.

(1.) In the defence, as also in the attack of such localities as have been indicated, it is advisable to keep the supports ready for employment on the wings, whether to get round the enemy's flanks in the offensive, or to be able to meet in good time a similar attempt on the part of the enemy. A third supporting body placed in rear of the centre, when the strength will permit, will serve to reinforce weak points in the defence, or to act against corresponding ones on the other side.

(2.) The officer commanding the dismounted men will always take care that a compact support remains in hand at his disposal with which he can support parts of the firing line, or can deal the decisive blow in the attack. This is more especially necessary in the defence of localities, as by reason of the power of the initiative possessed by the attack it is absolutely requisite to keep a portion in hand for emergencies.

(3.) It is of the highest importance that the groups and supports should be kept perfectly in hand, even in the most broken ground, that the men do not scatter or act on their own account, but that all the groups and supports conform to the general idea underlying the attack or defence, mutually supporting each other, and never losing sight of the object in view.

(4.) Too many groups should not be extended at first in the shooting line; the leader must economise the forces entrusted to him, so as always to have in hand some intact bodies which he can employ at the decisive moment at a threatened point, or to augment the firing line, or occupy important spots on the enemy's flank, according to the course of the fight and the movements of the enemy.

(5.) Both in the attack and defence a distinction must be made between (a) slow and quietly sustained fire, (b) brisk fire, and (c) violent or energetic fire.

Zug and group-leaders should know exactly when to use each sort, so as to be able to instruct their commands and direct the fire; thus, in an attack the fire from under cover at a considerable distance should be slowly nourished, while, when one body is advancing by rushes, a brisker fire must be kept up by the portions still lying under cover; similarly in the defence, when the enemy leaves his cover and advances at the run. But in the attack a violent fire must be maintained from the last cover, so as to prepare the final attack; and similarly in the defence, when the enemy advances to the attack and makes the rush.

(6.) Before attacking a position, a leader should reconnoitre it, and, if possible, bring artillery fire to bear upon it.

(7.) The leader should endeavour not only to discover and take advantage of the weak points of the defence, as to the ground and mode of occupying it, and to take the enemy in flank, but he must remember during the fight to observe all approaches by means of mounted patrols on the flanks.

(8.) Circuitous routes to the object of attack, should, under no circumstances, be avoided, if they allow of a covered approach to the position, and thus tend to diminish the losses. The men must take advantage of the slightest cover, the most trifling rise of ground, the smallest hollows, shocks of corn, &c. Open stretches of ground, exposed to the view and fire of the enemy, must be passed at the run; in broken ground the men can move more deliberately.

(9.) The leader should find out by which route he can with the least loss approach the object of attack, and bring fire to bear upon it while remaining under cover as long as possible; this is the route he must choose.

(10.) The fire of the line must be regulated so as to be as concentric as possible, and directed against the centre of the enemy's position. Villages and plantations should be attacked so as to envelop the salient parts of their borders.

(11.) One should never see long, even though well directed, firing lines, except when the borders of woods or villages are occupied, and the men have good cover. On the contrary the zugs, or individual groups should advance to the attack independently, taking full advantage of the ground while passing from point to point, from cover to cover. The advance will then be conducted in echelons and by successive rushes, so that one group or zug will remain under cover and keep up a brisk fire, while the other endeavours to reach the next stand-point at the run. In this way the fire will never cease, and the progress of the advancing bodies will be very much facilitated and supported by the fire maintained. Thus all the men in the firing-line must never advance simultaneously to the attack, except in the last rush by which it is intended to dislodge the enemy, when all the disposable force must be employed, thus throwing all the moral influence into the scale in order to ensure the final result. This last rush, accompanied by loud hurrahs, must be made in a determined manner from the last cover, which should be as close to the enemy as possible.

(12.) The mounted reserve must keep up communication with the dismounted party during the attack by means of mounted orderlies, so that they may intervene opportunely in case of an unforeseen or successful offensive movement of the enemy, and may be ready to act quickly as cavalry proper if the attack succeeds.

(13.) The dismounted men, if the attack succeeds, must not be tempted to rush after the enemy; they should content themselves with occupying the taken position, and maintaining themselves in it as long as there is any fear of a return attack on the pursuing and reconnoitring reserve.

(14.) In the defence the greatest energy and skill must be used in taking measures to maintain the first line, the border, &c. The supports must be strictly prohibited from establishing themselves in houses, quarries, deep sand pits, or dense clumps of trees, as the defence of the first line will thereby be deprived of

numbers which could be effectively utilised in it, and the forming up of the supports from such cover will generally take too long a time.

Nothing must be neglected in the first line which could strengthen the position; barricades, abatis, or trenches should be employed, and houses should be prepared for defence.

(15.) When a *lisière* is occupied, the possibility of a flank attack by the enemy must be borne in mind. The defence should be distributed in sections, the supports placed close in rear of weak and menaced points and ready to push forward.

(16.) The mounted reserve, placed in rear of a defile, should be in such readiness as to be able to support the dismounted men, in case of their being repulsed, by a well-timed charge, and to give them time to rally. The dismounted men must retreat in the fighting formation, that is, in the groups they form; and both bodies, those on foot and those mounted, must mutually support each other in these different circumstances, so that the former may be able to reach and mount their horses.

(17.) It will be of enormous importance if the cavalry is able, by making judicious use of the ground, to hide from the enemy both its strength and the fact that it has no infantry with it.

7. CONCLUDING REMARKS.

While by no means losing sight of the fact that the dismounted service of cavalry is only an expedient for enabling cavalry under certain particular circumstances to accomplish its general and more important missions, which without its aid would have to be renounced, there is no doubt that the self-confidence and consciousness of independence, which every individual cavalry soldier and cavalry in general should feel, will be much increased by careful practice in the matters mentioned in Chapter 2 of this part, and by inspections, in which full value should be attached to thorough training in the handling of the carbine, loading, aiming, position, firing, fire discipline, taking advantage of ground, and the leading of offensive and defensive dismounted combats.

PART VI.—FIELD SERVICE AND FIELD MANŒUVRES.

CHAPTER 1.—GENERAL VIEW OF THE ORDER TO BE OBSERVED IN INSTRUCTION.

It is indisputable that in all matters of duty certain prescribed forms are necessary; an army without formal regulations could not exist, or it could not hope for any success.

How much or how little is necessary will depend on the character and degree of education of the nation, and on the material of which the army is composed; some armies require more and some fewer regulations. But too narrow restrictions must not be imposed, or harm will be done; and this especially applies to the important branch of field service. This must be conducted on sound principles and in a rational and systematic manner, as thus alone can results of any value be obtained.

In this spirit the following directions are issued. They set forth the progression which should regulate the instruction, and the main considerations to be borne in mind so as to carry it out in accordance with sound principles.

As to the rational progression of the instruction, it may be considered under the following heads:—

(1.) *Theoretic Instruction*, the main object of which is to form and develop as much as possible the thinking and judging powers of the men, to regulate their ideas, and extend the horizon of their thoughts; and in this the use of mere set phrases and forms of speech learnt by heart should be avoided. It is the understanding that must be exercised, and this will be best effected thus: the practical execution should be prepared as much as possible by theoretic instruction, and this is not to be done by mere mechanical means, but by thoroughly explaining all the points in question, and as far as possible stimulating the powers of the understanding. Thus in explaining certain fixed rules we should always go back to the cause, the reason why this must be so and that so, and the men must always be questioned as to the causes and reasons of things, so as to force them to be clear about them. As it is quite impossible to put before them all the cases which can occur on field service, and equally impossible to prescribe exactly what they should do in the thousand and one conditions in which they may find themselves, it is necessary to give them certain guiding principles, general categories, with the spirit of which they should conform, *e.g.*,—

(I. C.)

O 2

Q. How and according to what should a vedette regulate his conduct and mode of action?

A. According to what takes place on the side of the enemy.

Q. What sort of events may occur on the side of the enemy?

A. Events of three kinds; 1st. The event may be not very decided or distinguishable, still something that can be observed and not altogether unimportant.

2nd. It may be something decided, well marked, and important.

3rd. It may be something of urgent importance requiring rapid action.

Q. What cases are to be understood under the head "Undecided Events?"

A. Unusual sounds, loud barking of dogs in the villages in front, distant shots, thick clouds of dust, &c.

Q. What cases come under the category "Decided Events?"

A. The approach of bodies of the enemy, strong patrols, &c.

Q. What cases are included in the category of "Urgently important Events?"

A. The rapid approach of strong bodies of the enemy's cavalry, or the advance of a force of the enemy of all arms.

Q. How do vedettes act in the first case?

A. They circle in order to attract the attention of the piquet.

Q. What do they do in the second case?

A. One of the men rides in to report.

Q. How do they act in the third case?

A. One man fires as a signal in the direction of the piquet, and rides in at full gallop to report.

Q. What must every vedette know on his post, and on what points must he be instructed?

A. He must know what is before him, what is on each side of him, and what is behind him.

Q. What then is before him?

A. The enemy and the ground.

[What ought he to know about these?]

Q. What is there on either side of him?

A. The neighbouring vedette and the intermediate ground.

Q. What is there in rear of him?

A. The piquet and neighbouring piquets, the ground between them and the paths leading to them.

By proceeding in this way, generalising instead of specialising everything, the ordinary run of men will be brought to think and reflect much more, than they would be by going through a host of particular cases with them, and laying down what they ought to do in each instance.

Owing to the endless combination of circumstances that may occur, it would be impossible to exhaust them, and the result would be that every fresh case that occurred would cause irreso-

lution and uncertainty, and even lead to the man's doing the very opposite of what he ought to do. On the contrary, if the broad general principles have been clearly explained to the man, if the instructor has endeavoured in the theoretical course to stimulate his thinking faculties, reflection, and judgment, each individual will have no difficulty in discovering what is the right thing to do in any particular case, will act in the general interest and not fall into any grave error.

The main thing in all theoretic instruction, and especially in the matter of field service, is to develop a sound understanding. The instructor who knows best how to effect this, will succeed best in preparing his men for putting their knowledge into practice, and give them most independence, which is the real end of our labours.

If by thorough theoretic instruction, conducted in accordance with this method, a basis for further progress in the duties of field service has thus been laid during the winter half year, we next proceed to—

(2.) *The practice of field service on foot* in the yard and field day ground (Reitplatz). Two bodies of men will now be opposed to each other, and posts and vedettes will be placed. In this way the mode of challenging, giving the sign and countersign, relieving vedettes, posting them, in short all those matters for which certain precise regulations have been laid down will be learnt.

As already stated, certain forms are necessary in all details of duty, including field service; but in this department they must be reduced to the minimum absolutely requisite, everything purely mechanical must be put into the background, and all must be made to depend on individual thought and sound judgment.

By having too many forms the true spirit would be stifled, and it is a very dangerous thing to impress on the young cavalry soldier too many rules to be observed in different cases; it will lead to his neglecting things more important, or he will be uncertain what to do, which is the most dangerous of all.

If then these forms must be reduced to what is absolutely necessary, so as to leave full play to the mental faculties, they must on the other hand be clear and decided, must become second nature to the men, a mere matter of habit, so that they are not put out by them. The rules given must be as natural as possible, conforming to what really occurs or is necessary. There can be no doubt that they should be changed as little as possible, and not altered without the most urgent necessity, so that they may become part of the soldier's flesh and blood. Still they are but of secondary importance, for from no service more than from that under consideration, must formalism and pedantry be excluded. They are death to it, since everything depends on the free and unrestricted use of the reasoning faculties; men must think independently and learn to act in the *spirit* of the orders and regulations given them. This, no doubt, is most diffi-

cult to arrive at, but it must and can be attained if only the right means are employed.

(3.) *Map reading* is one of the most necessary means for the preparatory training of non-commissioned officers in field service, and for men who aspire to the rank. It is absolutely necessary that they should learn to find their way on the map, and also on the ground with the help of the map. Sketches of the country round garrison towns, and maps on a large scale are the best for this purpose. In order to make the lessons more instructive, squadron-commanders should make their non-commissioned officers work out on the sketch, verbally and in their presence, small schemes or problems, such as daily occur on field service, and should give such instruction as the case may call for. The ability to read a map, to understand it and work easily by it, will lead to striking results.

Ground near the station that is sufficiently well known will serve for the beginning, and it will be easiest to work on this ground and on the sketch representing it. When the non-commissioned officers have learnt to understand this, it will not be difficult to work by the map on unknown ground. Of course they must have been made familiar with the conventional signs, &c., so as to be able to recognise hills, woods, marshy ground, valleys, villages, &c.

(4.) With this is intimately connected an exercise, which cannot be too highly recommended, and which must lead to most important results, provided the instructing officer proceeds in a thoroughly practical manner; I refer to the practice of the squadron-commander riding over the ground with his officers, non-commissioned officers and intelligent acting non-commissioned officers (*Gefreite*), proposing problems and schemes for advanced guard, outpost, and patrolling service, in relation to the varied circumstances of the actual ground, and making each of them solve them practically. In such employment the squadron-commander will find the very best opportunities for explaining thoroughly to all his subordinates his views regarding the details of field service, and for securing uniformity of ideas and action. This will be the proper school in which to instruct them in this most important branch of their duty, and it will depend entirely on the squadron-commander to make the best use of the occasion; for this he must understand how to apply the true and fixed principles to each case according to the varied situations and changing conditions of ground.

Exercises of this sort economise both time and energy, and should always be executed before practising actual field service with the men, so that the leaders may be thoroughly acquainted with their duties and know before hand what they ought to expect from their men. These important exercises will tend to give the subordinate leaders a thorough knowledge of ground, and enable them to judge of its influence on the movements of troops and the proper mode of leading them; this should always be

effected by the directing officer giving concrete examples, actual and clearly defined exercises on the ground itself.

(5.) *The practice of patrolling duty* would next follow. For this purpose small patrols of four or six men under a non-commissioned officer or intelligent acting non-commissioned officer should be sent out daily on missions, which should be clearly defined and in writing; these instructions should be gone over with the patrol commanders before the start, so as to ascertain that they thoroughly understand them. The programme should sufficiently indicate the route to be taken and the nature of the reconnaissance to be made; the latter should include the most varied objects, such as, whether the roads followed are passable for all arms; whether the country for half a mile to one mile on each side of the roads is passable for all arms; whether defiles, hollow roads, bridges, and passages of rivers met with on the roads are passable; reconnaissance of localities with reference to their capabilities for the quartering of troops, or with respect to their capabilities for defence against attacks from certain directions; whether rivers and streams can be crossed; finding out the points of crossing and means of passage; finding a position for a piquet in a particular neighbourhood with a view to covering a certain section of ground; reconnaissance of a certain position or section of country, &c. In all these exercises the first condition is that the ground must be looked at from a certain point of view of military importance; to be of any use the mission must never be of a merely general character. It is advantageous, and much increases the value of these exercises, if the verbal reports of patrol commanders are accompanied and supported by small pencil sketches executed in the saddle. It is only exceptionally that a written report will be required. The routes of patrols should, as far as possible, be so regulated that they do not return by the road they took in going out; they should rather take a circular path, so that the ground ridden over may be as varied as possible. Further, it is well so to arrange the rounds that two patrols always cross each other; in this way some control can be exercised over the patrols, as both commanders will have to report the meeting, the place and manner of it. The immediate control of the patrols will be exercised by the officers who will be specially detailed for the duty. As a matter of course, these patrols will move with an advanced file (*Spitze*) as before the enemy.

(6.) After the above will follow *the practice of field service properly so called*, commencing with the simplest exercises, and advancing by degrees to more complicated ones. In this it must be held to be a fixed principle, that the duty shall be carried out in every respect exactly as if in presence of the enemy, every advantage being taken of the conformation of the ground, and correct distances and intervals being adopted, just as would be on actual service.

It is necessary that a general idea should always be given

for each exercise, which will lay down the general situation, and that detachments opposed to each other should receive special instructions, although these may be very simple and insignificant, merely having regard to the practice of field service, as the troops are not to manœuvre against each other. Care should be taken that the opposed detachments do not move off from their barracks, &c., together at the same time, but at different times and separately; that they are dressed in different orders, and carry distinctive marks; that the body which marches out first throws out a rear guard, and the one following an advanced guard; that night field service is practised by night, and only by night. If these things are not attended to the soldier will get an entirely false idea of things, and will end by being confused and uncertain.

It must here be specially remarked, that the opposed chains of outpost must be so far apart that the posts cannot see each other; this is not only necessary in order to leave a sufficient field for the patrols, but is requisite to make the disposition of the outposts correspond with the reality. On the same principle no more vedettes should be posted than are absolutely necessary, nor more than would be used on actual service, as it is of the first importance to husband one's forces; moreover, if this were not observed, the men would be led astray and receive erroneous impressions, which would injuriously affect their conduct in future; this must be most carefully guarded against. Outposts therefore must be placed exactly as they would be in time of war; and as far as possible flat level plains should not be chosen, but varied and uneven portions of country.

The habit of officers and non-commissioned officers causing themselves to be challenged when visiting their vedettes, and giving themselves out as deserters, parlementaires, countrymen, &c., is highly impractical, for the only result of it is to confuse young soldiers. It ought not to be difficult to see that it is far better that whatever is challenged by a vedette shall really look like what it is intended to represent.

With regard to the principles now explained it will of course be understood that these exercises will only be performed on horseback and on the actual ground, where the mere forms of field service become of secondary importance, and must be considered as only barrack-room knowledge; the two must not be mixed together.

The common attempt to justify the posting of too many vedettes, on the ground that it is necessary in order to let as many men as possible take part in the exercise, is not satisfactory; the disadvantages far outweigh the supposed but unreal advantages of this mode of proceeding.

The strict observance of the principles previously mentioned and illustrated must be insisted on if we would have the men free from all uncertainty, and thoroughly acquainted with field service.

It will be taken for granted that these exercises should be carried out at first by zugs, and afterwards by larger detach-

ments, as the men show a fuller acquaintance with their duties; that they should be performed on the ground itself, and that the latter should be changed as frequently as possible. One of the weakest points in these exercises is that the vedettes have always to be posted near barracks, which causes a sameness in all the drills; superintending officers must therefore do their utmost, by constantly changing the idea and conditions of these exercises, to give them a new form and aspect, so that they may cease to be monotonous, and may give more play to the intelligence of the men, thus becoming more instructive. The main end of all the instruction is to make them quick in thinking and independent in acting. In addition to all the indispensable detailed rules, it must constantly be impressed on the men that the safety of the whole army depends on them, that they are the eyes of the general, and that if they would properly fulfil their important duties they must ride far, advancing boldly towards the enemy, observe correctly, and report quickly and accurately. All our efforts must be directed to educate them to this; every exertion must be used to overcome in them slowness and indifference. Every one should look upon it as a point of honour to distinguish himself in field service, to be able to cope with all the circumstances that may arise, and to be equal to all that can be required of him.

While all unnecessary overriding of the horses must be opposed with the greatest determination, one cannot approve of the very frequently heard order that they are not to move at a faster pace than the trot. The scout must ride about a good deal if he is to see anything; he must approach near to the enemy, and must not allow himself to be approached; he must not spare himself, nor his horse within a certain point. It is a well-known matter of experience that the very regiments which were sometimes reproached in time of peace with working too well and their men being too bold, have performed these important duties best on actual service; the taunt as to their "peace-bravery" was not justifiable. The training they received in peace was after all the right one, for here too the principle applies, that the soldier in the field is only good and useful at that which has become a matter of habit and second nature to him in time of peace.

The tendency of men to exaggerate the strength of the enemy in their reports must be strongly repressed, as such exaggerations naturally take larger dimension in the presence of the enemy, sometimes to an enormous extent; the men should always rather under-estimate numbers.

(7.) After thus passing through the proper school of field service, we shall proceed to the actual application of it in the field manoeuvres, again progressively advancing from the smaller to the more important. Each officer and non-commissioned officer must be employed independently at two such manoeuvres at the least. We begin with the manoeuvres of the non-commissioned officers.

It must be laid down as an absolute principle for these exercises, that that field manœuvre is most successfully conducted and most instructive in which the secret of the mission is best guarded, the strength of the opposing force, its position, movements, &c., best concealed by each of the parties engaged, where the veil in front of each side remains unpenetrated for as long a time as possible, and is only removed or broken through by the measures taken by the enemy. To this end must all the efforts of the leader tend; he must, moreover, do his best to counteract the difficulty arising from the troops of both parties belonging to the same military station, where everything is so well known.

The whole value of the exercise is lost, has no interest, and does not fulfil its object, either as regards leaders or men, if each side is not in absolute ignorance of the other. To this end it is advisable not to give their instructions (which should be sealed) to the leaders, until immediately before they march off; the detachments should move off at different times, and, if possible, by different outlets; and a third body should be despatched, after the departure of the former, whose object will be to join and co-operate with one of the other main bodies, in accordance with special orders, which will afford it a most instructive and practical lesson.

There are besides a host of means for attaining the object in view. The leader who best understands how to make use of them will best succeed in perfecting his men in this important branch of duty; he will develop in his officers acuteness in divining the intentions of the enemy and the meaning of apparently unimportant indications, will lead them to resolve quickly and to act vigorously, while the cavalry instincts of the men will be sharpened.

The tension of mind and excitement of the mental faculties necessary for fulfilling the task in hand and overcoming the obstacle imposed by the adversary, last only so long as the veil between the two parties remains intact. If everything has become apparent, then there only remains to apply the tactical principles which regulate the action of our arm, to maintain strict order and cohesion in the squadron, &c., which will result from the firmness and precision with which commands are given, and the true tactical leading of the troops, to which the whole attention of the leader must be directed. The very common excitement of young and inexperienced leaders, which finds vent in hasty and contradictory orders, or in the frequently heard calls "Come here! Go there!" which results in breaking up the whole body so that it meets the enemy in an utterly disorganised state; all this cannot be opposed too firmly.

The same must be said of the common tendency to make many detachments with the object of guarding everything. Every detachment is a cause of weakness, and can only be allowed when, on mature reflection, it appears absolutely necessary. If, however, it is determined to detach a party, the leader must make himself quite clear about what is to be gained by it;

if it is only to observe better, he would send two reliable men ; if it is to fight, the detachment must naturally be stronger ; but this will seldom be requisite in the case of small bodies, such as we are now concerned with ; here as a rule we only want to *see*, for which but a small detachment need be made.

The greatest importance must be attached to the condition that every one who is entrusted with a mission of any sort, understands thoroughly what he has to do, that, undeterred by all other circumstances and obstacles, he keeps the main object constantly in view, and makes every exertion to fulfil the task. Leaders very frequently fail in this. The most trivial circumstances, the most trifling measures of the enemy, cause them to deviate to an unjustifiable extent from the task proposed to them, which at last is entirely lost sight of, in order, perhaps, to engage the enemy, it may be successfully, or for other imaginary advantages. This is utterly wrong ; the fulfilment of the mission entrusted to the leader must come before everything, and only the most determined and insuperable opposition of the enemy should prevent it ; the obtaining of ever so important a success is not sufficient to excuse deviation from the leader's orders. The superior officer who entrusts the mission to a subordinate should be able to feel certain that it will be properly fulfilled, that the party in question will reach and occupy the position indicated to its commander. Every means must be adopted to inculcate these principles on all leaders, and no deviation from them which is not clearly justifiable should be allowed.

CHAPTER 2.—THE MOST IMPORTANT PRINCIPLES AND RULES FOR THE PERFORMANCE OF ADVANCED GUARD, OUTPOST, AND PATROL DUTIES.

a. INTRODUCTION.

The following notes, the result of long-continued observation of the faults which most commonly occur in practice contain some guiding principles for the manoeuvres, combats, and outpost service of small detachments. It would be well to make these principles the basis of all exercises in field service, and to make all officers and non-commissioned officers acquainted with them. If these rules be acted on and made part of the flesh and blood of all leaders, the most serious and common faults will be avoided, while uniformity of action will be secured, and great progress made in this branch of duty.

b. IN GENERAL.*

(1.) The exercises in field service when performed mounted on the actual ground, must be executed in every respect exactly

* Some of these principles have already been indicated in the preceding chapter.

as they would be in reality, as that is the only way of giving the men an exact representation of the thing, and instructing them properly.

(2.) As soon as the troops assemble or march off, leaders must make their men acquainted with the following facts:—

- a. From which direction the enemy is to be expected; which front is menaced; in which direction to retreat if necessary; from which direction to look for support; what is the general situation. Every detachment will therefore march off with advanced or rear guard, according as the enemy is supposed to be in front or in rear, so as to assist the men in realising the supposed situation.
- b. What are the signs by which to recognise the enemy; what distinctive mark he carries.
- c. What is the mission entrusted to the leader. This can be explained to the men in a few plain words, so that they can picture the whole exercise to themselves, and may not merely ride along without taking any interest in the matter, but may be stimulated to think for themselves.

The men should be able to answer correctly and clearly such questions as their leader may put to them on the above heads.

If this is otherwise, the whole exercise is worth nothing; the men have only a hazy idea of what goes on, whereas they ought on the contrary to act according to their own convictions, and the exercise should stimulate their intelligence and judgment.

(3.) Above everything the leader must endeavour to get a thorough understanding of the mission confided to him, to identify himself with it, to keep it distinctly and fixedly before his eyes, and not allow himself to be led away by extraneous matters. It must be his sole object and a point of honour to fulfil the task assigned to him at any cost, and he must take his measures accordingly. The more intelligence and thought he devotes to the task, the more quickly and easily he will accomplish it. Some men succeed in everything, others in nothing, and this just depends on their having the necessary tact and intelligence.

Thus a leader should not, as so often happens, allow himself to be led into executing grand manoeuvres, trying to turn the enemy, or fighting him when the mission does not necessitate it. In making a reconnaissance, for example, the chief thing is to *see*, not to *fight*, and the latter only hinders one from seeing; indeed the enemy, to whose interest it is that we should not see, prevents our doing so in this way. Even when one is compelled to fight against one's will, seeing, and seeing as much as possible, must be the main consideration.

(4.) Every leader of a detached party must specially name his second in command, who will perform his duties and assume all responsibility during his temporary absence, should the exigencies of the service at any time require him to leave his post; this of course will happen as rarely as possible. This

selection of a representative in command must not be ignored as a thing which every one will understand as a matter of course, or unavoidable misunderstandings will be the result; but this temporary commander must be named when the chief leaves the party, so that he may understand and properly take over his duties, and every man may distinctly know whom to obey. The same mode of proceeding must be observed in the case of large as well as small detachments, since it is a fundamental principle that *only one person must always be held responsible for the troops commanded by him.*

(5.) No leader should mistake his road anywhere within nine (English) miles from the station; and even at greater distances, in manœuvring and when in the field in the enemy's country, every leader should use every precaution against taking circuitous or altogether wrong routes, which can easily be avoided if one is able to read a map. The following of roundabout or wrong roads has the very worst effect on all under command, weakens their confidence in the leader and his ability to command, and takes it unnecessarily out of the horses, whose powers can be put to better use. Every commander should be thoroughly prepared for his mission, do everything on due reflection, and not in a happy-go-lucky manner, so that all his measures may have reason. He must not neglect, while on the march, to acquaint his men with the surrounding country, the names of places, direction of the roads and waterways, their names and the places of passage of the latter. Nothing is more important and necessary for the cavalry soldier than to be thoroughly capable of guiding himself, both with reference to the points of the compass and the position of his own troops. This applies equally to cantonments as to the march. The men should be constantly reminded of and instructed in the principles which regulate these proceedings, so as to cultivate their knowledge of country; all trifling indications in nature and different localities must be made to contribute to this end, such as moss on trees and stones, the direction of the wind, position of the sun, pole-star, church steeples, graves, &c.

(6.) It is of the greatest importance to instruct the men to send in precise and clear reports.

It must appear clearly from the form of report sent in, where the message comes from, without any question on that head having to be asked; thus, from the point of the advanced guard the report may be sent as follows:—

Lieut. A, of the advanced guard, reports that
 Or: Serjeant B, of the right flank patrol, reports that . . .
 Or: Vedette No. 2 reports that
 Or: Serjeant C, of the reconnoitring patrol in the direction
 of O, reports that
 Or: Corporal D, of the secret patrol in the direction of P,
 reports that
 Or: Lieut. E, of No. 4 Piquet, reports that

In practising the sending in of such reports care must be taken that the men insert the proper names of leaders and places, and do not merely use letters as in the above examples. Such indistinct hieroglyphics, which may appear very scientific, have no meaning for the men, and only confuse them as to their purport; this must be avoided, as we ought always to place only the reality before their eyes.

The sender of the report should be able to specify the force of the enemy (whether he consists only of cavalry, of cavalry and infantry, or of the three arms) and the direction from and towards which he is marching, and he should know how to report this; to this end the men must be previously instructed.

In the practice of field service, as in that of merely sending in reports, the men must on no account be allowed to report matters which they would not be permitted to do on real service; as, for instance, that a village, farm buildings, or a wood, has been searched and no trace of the enemy found. If they then sent in reports whenever nothing was discovered about the enemy there would be no end to the despatches, and the horses would be ridden to death in merely taking them. It must, therefore, be laid down unconditionally that reports are only to be sent when the enemy has really been discovered, bridges have been destroyed by him, &c.

(7.) The ideas and terms occurring in field service must be strictly adhered to, clearly distinguished from each other, and precisely and thoroughly explained to the non-commissioned officers and men; for from the confounding together of these expressions, the gravest misunderstandings and most untoward results arise; thus—

Outposts, advanced guard, and rear guard, are general terms for several detachments.

Flanking patrols are only used when on the march.

Visiting patrols are only used for a chain of vedettes, and, therefore, only at the halt; they are for the purpose of visiting the outpost chain and outlying posts of that chain, so as to be assured of their alertness. They have nothing to do with the enemy.

Reconnoitring and secret (sly or sneaking) patrols are sent towards the enemy's position, and the ground between him and our chain of posts.

If these terms are not strictly adhered to, there will always be doubt as to the functions and duties of the bodies indicated.

It is then necessary that every detached party, every vedette, patrol, &c., should know thoroughly what it is, what its business is, for what purpose it was detached. If such a detached party be asked "What are you?" a precise answer should be forthcoming, *e.g.*,

"No. 2 vedette of Captain A's piquet;" or

"Point of Serjeant B's reconnoitring patrol."

(8.) In questioning leaders and men the reason why, the motive of the thing should always be asked, so that they may be led to think for themselves. Answers got off by heart from theoretical instruction should not be taken, but such only as demonstrate that the men understand the matter, such as give the reason and cause why the thing is so or so.

(9.) The main thing in all our practice of field service is to teach the men to see correctly and much, to take notice of everything, and be able to report properly. Everything depends on this, and to attain it no exertion must be spared. It is a point of honour with the cavalry soldier not to be surprised by the enemy, *e.g.*, not to allow him to break through the outpost chain; reports must therefore be sent betimes by the vedettes, so that a patrol or the whole piquet, according to his strength, may be sent beyond the chain to oppose the enemy and drive him back.

(10.) Detached parties must always keep up their connection with their main body, as only thus can they fulfil their mission. If they make themselves quite independent they do harm, since they weaken the main body without being of any use to it. This fault occurs all the more frequently as it is but human nature to strive to be independent.

(11.) Whoever tries to cover and secure everything, usually covers nothing; and a too wide extension of the outposts and splitting them up into detachments cannot be approved of. The greater the danger is, the nearer the enemy, the less favourable the ground, the more concentrated must the outposts be, and the troops kept nearer together. The great Frederick says "Those who are intelligent and judicious see at once the things that are of most importance."

(12.) It cannot be too often repeated that it is a grave error to place too many vedettes; this fault, however, is very frequently committed, and in this way outpost service fritters troops away. The fact of operating before the enemy does not necessitate a widely-extended chain of vedettes; what is wanted rather is to occupy the roads, important heights whence observations can be made to some distance, and knots of roads, with detached non-commissioned officers' posts (or so-called "Cossack posts"), of which only one man remains mounted. These Cossack posts are much more useful than vedettes, the security of troops in camp is much more surely effected through them, and the horses are much less worked than when widely-extended chains of vedettes are employed. The partiality for the latter is very general, but why have this expenditure of power? Where I can secure the desired end with one vedette, or with one post, I do not place two or even three; when the sentry on the piquet, about 20 or 30 paces in advance of it, can keep in view the vedettes or posts, I do not place a communicating post there too!

Of course during a retreat and when one is pressed by the enemy, the precautions for ensuring safety must be doubled, and more posts must be placed than would be during an advance

when the enemy is retiring, or when he has received a check which has weakened his *morale*.

Above all it must be maintained that a well regulated, well directed and active system of patrols of two or three men, who will constantly keep up the touch of the enemy and at once report the slightest approach he may make, gives far more security than a chain of vedettes, however well the latter may be posted. Care must be taken that these patrols do not always go out at fixed hours, nor always take the same route; on the contrary, they should constantly change their paths, avoiding as much as possible the main roads, so that they may escape observation and be better able to see and explore.

(13.) For the reasons above given it is most important to practise patrolling duty to a wide extent, even when a chain of vedettes is employed, in order to ensure having experienced, intelligent, and clear-headed patrol chiefs. The missions entrusted to them must be distinct and precise. Undecided, badly thought out, and badly explained orders spoil everything; as such instructions cannot possibly be strictly carried out, the patrol leaders get accustomed to not obeying their orders. On the contrary, a man of the meanest comprehension would understand such an order as this, "You will reconnoitre with a patrol of three men in the direction of the left wing of the enemy's outposts, approaching them so as to be seen as little as possible; you will find out the position of his vedettes there, and if you can break through the chain you will also find out where his piquets are, their strength and composition, &c.;" or, "You will take a reconnoitring patrol of four men in the direction of the Lauter, examine the left bank, so as to discover whether it can be crossed from such a place to such a place, and find out the fords in that space which can be crossed by cavalry and infantry, &c."

Reconnoitring patrols and secret patrols must not avoid détours, if by making them they can reach the enemy unperceived. On open ground they should trot and stoop low, so as to hide themselves as much as possible. They should under all circumstances avoid engaging the enemy unnecessarily, as this puts their mission in the background, and causes it to be altogether lost sight of. To see much and rightly, and to make accurate and complete reports of what has been seen, such is the first duty of the patrol. An attack arouses the enemy, who will then be on the alert and send out stronger bodies, which will hinder us from seeing. A patrol, therefore, must not attack, unless compelled to do so. If all that is wanted has been seen, or if a patrol has not been able to accomplish its mission to see what it was ordered to find out, and hostile patrols oppose it, it should quickly retire so as to avoid the enemy's observation; delay is then quite useless.

(14.) In the practice of outposts, care must be taken that there is always sufficient room between the opposing chains of outposts for the patrol duty to be carried out unperceived,

and that there is always a tract of free neutral ground between them. The chains should not be so close together that the vedettes can plainly see those of the opposite force, or the patrols of the other side directly they pass their own outpost chain. This would put an end to that tension of mind and vigilance which it is of the utmost importance to keep up.

c. IN PARTICULAR.

(1.) An advanced guard should be capable of being formed rapidly, both from the halt and on the move, thus—

The zug-leader concerned gives the command, "*Advanced Party* [Point],* *March*" (or *Gallop, March*), followed by "*Connecting Files* [*Zwischenposten*] *March*," "*Flanking Patrols, March*," "*Reserve* [*Haupttrupp*], *March*." The so-called "Non-commissioned Officer's Party" having been discontinued in the new Regulations, there is nothing in front of the *gros* of the advanced guard but the Officer's party [Reserve]. Still it may often be necessary in woody or close country to detach a small body to the rear of the advanced guard to keep up connection between it and the *gros*.

Everything must be properly told off beforehand, so that there may be no mistake or disorder in the formation. The point and connecting files ride with drawn carbines. All the different bodies of the guard trot or gallop until they have got their proper distances, &c., which they preserve without being too minute, taking care, however, to keep in continual connection with each other, and consequently not getting too far apart.

It is advisable, particularly in close and broken country, for the advanced guard to drop individual men [connecting files], so as always to keep up connection with the main body and prevent its taking the wrong road.

The points of advanced and rear guards should never neglect to occupy heights near the route, from which they will see as far as possible, taking care to expose themselves as little as they can. With this view it is not advisable to put very light-coloured horses, which could be seen from some distance, in the points, especially in a secretly-conducted march. Horses too that have the habit of neighing or are restless should not be placed there.

(2.) As to the change of an advanced guard into temporary outposts, it is a rule that when a halt is ordered during the march, vedettes or Cossack-posts will be formed by the point of the guard and the flanking patrols, which will keep up communication with each other; the reserve becomes a temporary

* The "*Spitze*" being the most advanced part of the guard may be considered to correspond with the "Advanced Scouts" of the "Advanced Party" of the British Regulations, bearing in mind that there is *only one body* in the German Advance Guard corresponding to these two.—TR.

piquet. When the march is resumed the different parties resume their former positions.

(3.) Permanent outposts at the end of the march or combat must be posted under cover of the veil formed by the extreme points or combat outposts which are still remaining in contact with the enemy; the latter points and outposts must avoid all combat with the enemy, or it would certainly take larger proportions; all that is necessary is to observe the enemy.

(4.) The following mode of proceeding should be observed in placing outposts:—

• The Officer detailed to post a piquet and ensure the security from sudden attack of the troops encamped, after sending out the point and flanking patrols, moves to the spot where he proposes to place his piquet; from this point he sends out in a radiating manner in the direction of the enemy, to front and flanks according to circumstances, as many vedettes or Cossack-posts as from the configuration of the ground, &c., he thinks will probably be required to cover the zone entrusted to him. These vedettes or Cossack-posts have at first to post themselves provisionally at a suitable distance from the piquet, and at points whence they can see the ground in front as far as possible, and where they are well hidden; they must also try to be in communication with each other and with the next vedettes or posts of neighbouring piquets. As a rule, the points and flanking patrols will have to act in a similar manner when sent out during the march. By proceeding thus the main body is at once protected, even when outposts have to be placed by night in a country entirely unknown. As soon as this has been done, the officer, having given over the command of the piquet to the senior non-commissioned officer, and taken a patrol with him, rides to one flank of his vedettes or chain of posts, and passing down the chain, corrects the position of the vedettes or Cossack-posts, taking care that they are in communication with the posts of the neighbouring piquets. In this manner too the piquet is more quickly and better protected than when the officer takes all the vedettes with him and commences posting them from one flank, and the posts are more quickly established. Having corrected the position of the posts, one or more reconnoitring patrols will be sent out in the direction of the enemy, for, as cannot too often be repeated, patrols contribute much more to the security of the whole than fixed vedettes or posts, although the latter cannot be altogether dispensed with, patrols searching more ground and getting nearer to the enemy.

The extreme flank piquets should always be kept back a little, so as to form a kind of flank defence.

(5.) Piquets remain mounted until the posts are placed, their position being merely temporary and covered as much as possible; thus, they should not be in the open when at 20 paces distance right or left they could be well hidden in the border of a wood. The position for a piquet should be such that the horses may stand on ground as nearly horizontal as possible.

Moreover the piquet should be able to move freely forward, and to the flanks and rear; these conditions will generally be best fulfilled by placing it in the border of a wood, where too it is best screened from view. Whenever it is possible to avoid it, a piquet should not be posted on newly ploughed or very soft ground; green turf and solid ground are the best.

It must be a standing rule to place piquets near the roads, especially at night.

(6.) The position of piquets and the main body (*gros*) of the outposts should be changed as little as possible, so that the men may get their meals cooked and their horses fed as soon as can be. It is necessary that the outposts should be ready to fight as soon as possible, and not a moment should be lost in this respect. During peace manoeuvres arrangements must be made for conveying to the outposts as quickly as possible the requisites for the bivouac and their provisions, so that they may cook directly after entering the bivouac. With a little forethought this can easily be managed.

(7.) As soon as possible officers should be detailed to command the piquets. This is for the cavalry officer a post of honour, from which it would be quite out of place to excuse him on the ground of making his work easier.

The choice of the position of his posts and of the piquet should be left entirely to the piquet commander; when the latter has arranged them, and not until then, it is the business of the superior officer to inspect, and if necessary to modify them.

(8.) No horse in the piquet should be unsaddled or unbridled, but there can be no objection to shifting the saddles of a third of the horses at a time, once or twice within the 24 hours, and refolding the blanket at a quiet time, when there would be no danger from delay, and several patrols are out towards the enemy; similarly one may rub the horses' backs under the saddles, and rub down their legs, chests, and bellies. Of course this shifting of the saddles will be done as quickly as possible.

(9.) The whole of the horses of a piquet must never be fed or watered at once, but only a third at a time, so that at least two-thirds of the piquet may always be ready to fight. The feeding and watering should never be done during the early hours of the morning. Horses should be taken to the rear and apart from the others when they are to be fed.

In case the men are permitted to cook their food, the fire must be covered as much as possible and made in the ground, in a hollow or behind a wood.

(10.) The main body (*gros*) of the outposts must never be unsaddled. The saddles of half at a time may be shifted, the blankets shaken and refolded, and the horses well rubbed down, especially about the back. Only on the express order of the chief may half of the horses be unsaddled during the day; at night the whole must invariably remain saddled. Only half may be fed at a time, so that at least half may always be ready to

move off. Half the horses can always be unbridled by day, but none at night. As a matter of course no trumpet sounds can be allowed in the main body of the outposts.

When it rains, horses in bivouac must always be saddled, so that the blanket may not become wet and the horse may be protected. On the rain ceasing, the horses should be well rubbed over with straw, so as to dry their coats, warm them, and cause the blood to circulate on the surface.

I must here mention that in leading the horses to water the greatest regularity should be enforced, for not unfrequently the most unseemly things occur; led horses get loose, riders fall, and sprain or even break their limbs, &c. On this account an officer should always have charge of watering parties; men without led horses should ride in front, followed by those who have them; and the non-commissioned officers must be distributed along the whole column so as to watch the riding.

(11.) The principal duties of the piquet commander are as follows:—

- a. A piquet commander must never absent himself from his post; that is, he must always be attending to his duties within the chain of his posts.
- b. He should never allow himself to be surprised by the enemy, but the enemy on attacking should at any rate find the piquet mounted and on the line of the chain of posts.
- c. The enemy should never be able to penetrate the chain unperceived, or to break through it, so that the positions of the vedettes and posts, and of the piquet itself, may not be discovered.
- d. If for any reason connected with his duty, the commander of a piquet should at any time be compelled to leave it, he must always distinctly name the person who will command during his absence.
- e. If a superior officer approaches a piquet the men will not mount nor be ordered to stand to their horses, but will continue in their occupations; the commander, however, will mount and report himself to him. The men mount or stand to their horses only when the enemy compel them to do so.
- f. Each piquet commander is personally responsible on his honour for the security of the section of country intrusted to him.

(12.) The single sentry on the piquet, who is, so to speak, sentry on the arms, and has to watch the vedettes and Cossack-posts and report all that occurs there, is called the "*Schnarr-posten*;" he is dismounted and carries a carbine.

(13.) The single sentry put on between the piquet and those vedettes or Cossack-posts which the sentry on the piquet cannot see, is called "*Avertissementsposten*" (or connecting vedette); he is mounted with drawn carbine, and must not leave

his post. He does not report to the piquet, but conveys intelligence to it by repeating the signals (circling, firing, &c.) made by the vedettes. Of course these posts are only employed by day, and then but seldom.

(14.) If the general situation or particular circumstances require that a continuous chain of vedettes should be posted they must always be able to see the neighbouring vedettes or posts, so as to maintain constant communication with them.

(15.) Detached non-commissioned officers' posts, so-called standing patrols or Cossack-posts, have only one man mounted as look-out man, the others dismount and keep near their horses.

Restless horses and such as will not stand alone, should not be detailed for single posts or connecting vedettes, but employed for vedettes or patrols.

(16.) In order to prevent all misunderstanding it should be particularly observed that Cossack- (or detached non-commissioned officers') posts are not provided immediately by the *gros* of the outposts. In all circumstances piquets must be placed, and these throw out either the above posts or occasionally vedettes.

(17.) All vedettes, sentries on piquet, connecting vedettes, and the mounted look-out men of Cossack-posts, draw their carbines, as also do the points, connecting files, and flanking patrols.

All men transmitting reports to the rear from the vedettes of outposts or the points of advanced guards (within the outposts or advanced guards) ride with drawn carbines, and not with sword or lance in hand, while men carrying reports further in rear do so with sword or lance in hand.

(18.) According to the new regulations the reliefs of vedettes ride always within the outpost chain and with an advanced file (*Spitze*); this is done in order to keep one's position hidden from the enemy. The relief at night is conducted thus: the vedette on the party approaching calls, as usual, "*Halt! Who goes there?*" On the reply "*Relief*," he orders "*One man advance! Halt! Give the sign*;" on which the advanced file of the relief gives the first word of the sign, and the vedette the second.

The vedette then orders "*Advance nearer! Halt! Give the countersign!*" on which the advanced file gives it. If satisfied, the vedette orders "*Pass relief*," when the leader of the party gives "*March! Halt! Relief of No. X vedette to the front!*" (The reliefs must be properly told off beforehand). The relieving man places himself on the left of the man to be relieved, who reports to him all that has occurred during the past two hours and joins the party, which then moves on to the next vedette.

If the vedette has not noticed the approach of the relief in time, and is recognised by the advanced file of the relief first, the latter calls "*Halt! Who goes there?*" The vedette replies "*Vedette*," adding "*Halt! Who goes there?*" On the reply "*Relief*" the relief is carried out as before explained. The

vedette must never be induced by the call of the relief or from any other cause to allow himself to be interrogated by the advancing party, nor to give the first word of the sign; this must always be given by the person who wishes to pass the chain. The vedette is the chief person, the one in authority, and everyone, no matter who he be, must comply with his orders; this cannot be too strictly insisted upon nor too strongly impressed on the men.

(19.) Vedettes or Cossack-posts do not report to any superior who approaches them; but they will reply clearly to any question which he may put to them, taking care while doing so not to cease observing the ground or enemy, and not to leave their posts.

(20.) During the day vedettes and Cossack-posts neither challenge nor detain persons who are known to them.

(21.) Chiefs of patrols ride in advance of their men and not on the flank. The men of secret patrols ride separately, but keep up connection with each other.

(22.) The piquet commander should instruct his vedettes and Cossack-posts to make certain signals when anything particular occurs in front of the chain, or when anything happens which it is not of urgent importance to report, but of which the commander ought to be informed; *e.g.*, fires in villages, loud barking of dogs, &c. Signals of this sort are, circling by one or two men to the right or left at the different paces; these signals save the horses, which have not the fatigue of going far with reports, and they keep the men on the chain.

If there is danger in delay, as when the enemy approaches rapidly, the vedette will fire, not in the direction of the enemy but in that of the piquet, where he wishes the report to be heard; the man who has fired at once galloping in to the piquet to report.

If the vedettes or Cossack-posts are driven in by the enemy they should not retire directly on the piquet, so as not to discover its position to the enemy: they should rather retire to a flank in order to mislead the enemy and give the piquet a favourable opportunity to take him in flank.

d. CONCLUDING REMARKS.

What is to be particularly observed with regard to the preceding remarks on Field Service is, that the instruction must be *progressive* and *systematic*. Moreover, it cannot too often be repeated, that it is necessary, before everything, to act upon the intellects of the men, to compel them to think and reflect, to bring them to put all lifeless formularies aside, and to train them to be more independent; for then only, whether on actual service or during the practice of field manœuvres of all arms in time of peace, will they be fully prepared for the tasks which may be assigned to them; then only, owing to their activity, mobility, intelligence, judgment, clearness of observation, and

ability to send in rapid, correct, and skilful reports, will they succeed in covering themselves with glory.

CHAPTER 3.—FUNDAMENTAL PRINCIPLES AND RULES REGARDING FIELD MANŒUVRES WITH THE OTHER ARMS COMBINED.

Considerable experience having shown me that during field manœuvres attention is not always paid to these fixed principles, which, however, must be held as absolute laws both in the drill ground and open field; and as there is moreover an idea that they can be dispensed with during field manœuvres or before the enemy without any harm or danger, just as may suit each one's particular views, I am constrained to add the following remarks, to which the most earnest attention is invited:—

a. As first principle it must be laid down that that, and that only, which has been practised and acquired in the drill ground must be done and rigidly adhered to during the field manœuvres; for it is simply for this very purpose, and not as an end in itself, that it has been practised; and again, only that should be required on the manœuvre ground which will be wanted before the enemy, as the whole success is entirely dependent on this. This equally concerns the troops themselves, as the leading of them.

As to the former, it must again be repeated that the fundamental law is that there must be *perfect order*; troops must maintain this under all circumstances and conditions. Necessary as field manœuvres are, they would produce the most disastrous consequences if they were to be the cause of troops losing their good order; they would then be the very worst preparation for real service, which, if success is to be obtained, demands the highest degree of order and cohesion. One cannot therefore insist too strongly on regiments and squadrons observing this fundamental principle during the divisional field manœuvres, especially in the charge, where all our influence on the enemy lies. Every charging body which reaches the enemy in loose formation and is formed in more than two ranks, even when opposed to a weaker body, must be defeated and made to retire, provided that the opposing force is in compact order. All other movements too must be executed with the most perfect certainty and cohesion, as they would be on the drill ground. It is generally the leading, hasty and hurried words of command, that cause disorder in the troops; leaders must before everything be careful not to let things "slide," and must pay particular attention to their bearing, sustained attention, and mode of giving commands. In column they must direct the leading body truly and correctly, and in line and squadrons-columns must indicate the objectives clearly and so as plainly to be heard.

Squadron commanders, who are responsible for this minor leading, which is the first and indispensable condition for the correct leading of larger masses, are now made so independent [by the revised issue of Chapter V, Cav. Regs.] that they are now personally answerable for the preservation of the highest degree of order and cohesion in their squadrons.

As to the higher leading, the fundamental principles are laid down in the revised Chapter 5.

b. The fundamental principles for the leading and employment of cavalry having been explained in Part IV of this work, we need here only refer to some of the most important conditions, the observation of which is indispensable during field manœuvres.

(1.) All bodies larger than a squadron must invariably be formed in at least two lines, even when the enemy shows a broader front. The second line must always act offensively, intervening unexpectedly and on the flank of the enemy, which increases its effect tenfold.

(2.) The action of troops must always be in the direction of depth and concentric, never eccentric or diverging in different directions, which only splits up and weakens the effect of one's forces.

(3.) If there be no 3rd Line, no reserve, the whole of the 2nd Line must not be thrown into the attack of the 1st Line; thus, if the 2nd Line consist of only one squadron, two zugs must be kept back in reserve when the rest of the squadron pushes on to succour the 1st Line and takes the enemy's 1st Line in flank. These two zugs in reserve have, as object, to oppose the enemy's 2nd Line, if it appears, and to prevent it taking part in the combat; also they would disengage and cover their own 1st Line in case of its being repulsed, and prevent the enemy from pursuing it.

(4.) The 1st Line must *invariably* bring up one of its flanks by an oblique movement during the advance, and endeavour to gain one of the flanks of the enemy. A plain parallel frontal attack, executed by merely riding straight forward at the enemy, must never take place; the element of scientific leading must always be brought into play, and every leader must acquire the habit of manœuvring against the flanks of the enemy. If he does not act thus, he falls short of his duty as a leader; for the squadron can ride stiff and straight at the enemy without his help, and no science is required for that.

(5.) If there is a whole regiment in 1st Line, the 2nd Line must send a succour-squadron to follow it at 100 or 150 paces; but should the regiment in 1st Line consist of five squadrons, it will utilise one of its own squadrons as succour-squadron, making it follow in rear of the centre.

If there are four squadrons in 1st Line, there must be a succour-squadron in rear of it; this should never be neglected and must always be borne in mind by the leader of the 1st Line.

(6.) Troops formed up in rendezvous should be in close squadron column.

(7.) All opening out from close squadron column to squadron columns, and from squadron columns to line, must never be executed from the halt, but invariably done on the move; and similarly all closing from squadron columns to close squadron column.

(8.) The formation in squadron columns must be maintained as long as possible, and the formation of line must be put off till the last moment. It is a great mistake to remain long in line at the halt, or to advance in line when the attack is not intended; all this should be done in squadron columns, as during an advance or retirement the columns can close in to one another when the nature of the ground requires it, without any word of command from a superior officer, and resume their proper intervals when the ground again permits.

This formation adapts itself the best to ground and enables one most easily to take advantage of every inequality or wave of ground for forming up under cover or approaching the enemy unobserved. This must be particularly attended to.

(9.) If it be possible to avoid passing through defiles, villages, &c., it is better to turn them during an engagement; but if they cannot be avoided, they must at any rate be previously reconnoitred, since there is no more fatal situation for cavalry than to remain in a defile, or worse still, to be attacked in one.

A defile, both in advancing and retiring, must always be passed at the trot, rapidly, without halting, and in good order. It is impossible to form line too quickly after passing a defile.

If the enemy is compelled to pass a defile, through a hollow road, &c., when he must of necessity diminish his column to a narrow front, the favourable opportunity must be seized and he must be attacked on a broad front as soon as the head of his column is on the point of issuing from the defile.

(10.) When in presence of the enemy, and especially after an attack, threes must never be put about, but the squadron, &c., must retire by wheeling zugs about or by retiring by zugs from a flank.

Diminishing the front to threes or half-sections, and wheeling threes right or left, should be absolutely forbidden at field manoeuvres; the front should only be diminished to zugs.

In retiring from a flank the trot must never be exceeded.

(11.) Reconnaissances, which are merely for the purpose of *seeing*, should be made by weak bodies, a zug or officer's patrol being quite sufficient. It is useless to detach whole squadrons for this purpose, for this would be a mere waste of strength which can be better employed, and moreover would attract the attention of the enemy, who would then prevent our seeing.

In more important reconnaissances it is advisable to make free use of officers' patrols.

(12.) A fault must here be pointed out which is very widely spread and frequently repeated; that of detached bodies, which

are sent out for any purpose, making themselves too independent. They frequently return too late, or come in when their reports, &c., are of no use. This fault, love of independence, is grounded in human nature. The principle therefore cannot be too strictly maintained, that such detachments must come in as soon as they have fulfilled their mission, and that, when this is done, they must not act on their own account.

It is a fundamental principle to send out no unnecessary detachments, no more scouts, patrols, &c., than are absolutely requisite. The leader must therefore weigh well the necessity of sending out a detachment; if it is not absolutely indispensable it must not be done, as it is of the utmost importance to keep the party as strong and concentrated as possible. This must be inculcated on all officers.

(13.) It is of course understood that the sending out of battle patrols* under an officer towards the exposed or threatened flank, for the purpose of observing the enemy, must never be neglected. Each line must send out a patrol of this sort to cover its flank.

(14.) Mounted combat with firearms, or the employment of a line of skirmishers, is on no account allowable. All that is wanted is to scout, not to skirmish; firearms are only used on horseback to signal and not to shoot the enemy, for this would be of no use, and would only waste ammunition which could be much better employed on foot.

(15.) During an advance the employment of scouts, to seek the best ground, must never be neglected. Each squadron must provide for its own safety, so that it does not come into a *cul-de-sac* or have to halt before a hollow road. Two, or at most three, intelligent men, specially trained to the work, will suffice.

(16.) A repulsed enemy should never be pursued by the entire force that has attacked him, but only by the flank squadrons, and by the outward flank squadron of the 2nd Line which has executed the flank attack. The remainder will follow as a compact reserve at the trot.

(17.) All detached men who may happen to be in front when the line attacks, must clear it as rapidly as possible and quickly rally on a flank, from which position they will augment the effect of the frontal attack by making an attack in flank, increasing the number of sabres in the rank, making the shock stronger, and thus contributing to the success of the attack.

This does not apply to the battle patrols, who continue to watch during the attack and report as rapidly as possible any approach of the enemy on a flank.

c. As to the manner of leading and its results, the following essential principles are to be observed:—

(1.) Cavalry either stands fast, or advances against the

* These "Gefechtspatrouillen" correspond with our flank patrols in field movements.—T.E.

[See Note, p. 143.]

enemy, or has to retreat on account of receiving an order to that effect when there is a general retirement; in a word *it acts decidedly, each movement representing a definite, clear idea*. When this is not the case, when cavalry rushes hither and thither, backwards and forwards, right and left, it is evident that its leader does not know what he wants, does not comprehend his mission, is uncertain as to what he ought to do. Such a leader produces a very unfavourable impression.

(2.) *A cavalry leader should never wait till he is called; he must keep near the other arms, so as not to arrive too late. If it is possible to avoid it, cavalry should never advance through infantry, so as not to mask their fire; and the advance to the attack should not be made directly against the enemy, at any rate against infantry, which would draw the whole of their fire upon the cavalry; infantry should never be attacked in front if the flank can be charged.*

So far from waiting to be called, the cavalry leader must watch with the utmost vigilance both the enemy and the course of the combat, and take the initiative at the right moment, as when the enemy shows openings in his line, appears shaken or on the point of retiring, or gives other chances of success; the leader then putting forth his power as rapidly as possible, so as to get round the flank of his own line and throw himself on that of the enemy at the right moment. *But if he waits to be told to do this, the favourable moment will have been long past, and he will not be able to do anything; he must therefore, of his own initiative, get to the place where his action will be effective.*

(3.) If no other orders are given to the cavalry commander, he will always post his troops on one of the flanks of the line of battle, and as much under cover as possible; from this position he will be able to move freely and will best be able to cover the flank of the line and take part in the combat without masking the fire of his own side.

(4.) If the infantry is operating against a position, and the ground is so broken that the cavalry cannot possibly move rapidly, the latter must be dismounted under cover so as to husband their powers, while the leader will repair to the commander of the force, in order to learn his intentions and keep himself informed of the course of the combat.

(5.) *Wide turning movements are decidedly to be discouraged.* The leader who makes them lets go his line of retreat, and will be liable to be cut off, if only his opponent resolutely takes the offensive.

(6.) *The enemy's attack must never be received at the halt, but must always be met resolutely with a compact shock.* To stand on one's ground would be to violate the very first element of our arm, movement; the gravest fault that a cavalry leader could commit.

It was an old and strict order of Frederick the Great, that *no cavalry officer should allow himself to be attacked at the halt; whoever does it should be cashiered.*

(7.) *No favourable opportunity for an attack should be lost, and such should be sought for ; but a charge should be made only when there is a prospect of success, as when one is of equal strength or stronger than the enemy, or when one can oppose an equal front to the enemy, notwithstanding his superior strength, owing to the ground restricting the extent of his front, or there are other conditions of ground in favour of the smaller force.*

The men should never be led into such a situation as to render it necessary that they should go about and retreat without orders, as this demoralises them and gives them the idea which they cannot be allowed to entertain, that it is possible to go about and retreat before the enemy.

(8.) *Ground that is to be passed over in a charge must always be reconnoitred by scouts in advance, so that ditches, hollow roads, or other obstacles may not check or disorder the attack, and put the troops in danger ; this is a fundamental rule.*

(9.) Attacks of cavalry against cavalry must be properly regulated, according to the particular object of the charge.

(10.) Infantry should only be attacked when it has been broken by fire.

Unbroken infantry will be attacked only as a very exceptional case, when it is absolutely necessary, in the general interest, that time be gained.

(11.) Cavalry should never retreat before the enemy over open ground without having skirmishers [*Flankeure*] in rear of it, who will as much as possible delay the enemy, especially his individual skirmishers. In this case the carbine may in certain circumstances be used with effect on horseback, which in other cases it cannot be ; the *arme blanche*, sabre or lance, is however even here, as always, the best thing in the hands of a determined closed body. Whoever goes resolutely and boldly at the enemy in a closed body has already half won the battle.

(12.) One main duty of the cavalry soldier is always to keep up the "feeling" of the enemy when he retires. The troops nearest to him should always know where he is ; too much importance cannot be attached to this.

(13.) With regard to peace manœuvres there is nothing more unreal or opposed to the end in view than when the cavalry of both sides cling to each other, mutually paralyse their action, and isolate themselves from the other arms. This should never happen. After a charge, one side will have to retire by order of the umpires ; the cavalry of the other side will now be free to act again, and should endeavour to join itself with the other arms, and in concert with them to operate against the opposed infantry and artillery. The cavalry will thus be more effective than it would be if it clung to the hostile cavalry and followed up every horse of the other side. The three arms combined are always stronger than one of them isolated, however superior this one may be in numbers.

The repulsed body, which was either the weaker, or had attacked in uncompact order or in disorder, retires at the trot

to some ground which gives it cover and is convenient for rallying; the victorious body allowing it to retire quietly, and, under certain circumstances, following it later.

If the attack was against infantry, the cavalry must retire as quickly as possible at the trot out of fire, getting as much as possible under cover; it should never retire merely 500 or 600 paces, and then halt under fire, as this would be utterly unreal.

(14.) The existence of our arm depends on *resolute offensive*. The mission confided to us must before everything be kept in view, and no effort spared to fulfil it, no secondary ideas or considerations being allowed to interfere with it. All personal considerations as to one's own security must give way to the accomplishment of the one object set before us. Whatever has to be done must be done thoroughly and vigorously; no half measures, no irresolution. This is the main thing, and cannot be too often repeated, for what one does is of much less importance than the manner in which it is done. Thus a less wise, or even faulty and stupid movement, provided it be done with vigour and determination, is better than the most admirable and well thought out evolution executed in a tame half and half manner without nerve and energy. A firm resolution, even a defective one, will generally, indeed nearly always, be crowned with brilliant success; whereas the most judicious measures, if carried out in a spiritless and irresolute manner, will certainly miscarry and lead to no result, if they do not end in disaster and defeat. One should not, therefore, attempt to devise what is absolutely best in each case; what is requisite is to reflect quickly, and, having come to a resolution, to carry it out to the end, straining every nerve to accomplish it, and allowing no secondary consideration to have any influence; this must be the guiding principle of every cavalry leader.

APPENDIX A.

GENERAL IDEA

1. FOR THE MARCH OF THE 1ST BRIGADE (7TH CUIRASSIERS AND 10TH HUSSARS) OF THE COMBINED CAVALRY DIVISION OF THE IVTH ARMY CORPS, TO THE MANŒUVRE-GROUND AT JESSNITZ AND RAGUHN.

The Xth Army Corps stationed in the province of Hanover is mobilised; it has concentrated around the city of Hanover, and is commencing its advance towards the Bohemian frontier in the direction of Cöthen and Dresden, the latter place being the preliminary objective of operations. At Hinsdorf, to the east of Cöthen, the Army Corps will effect its junction with the IXth Army Corps, mobilised and advancing from Hamburg.

2. FOR THE MARCH OF THE 2ND BRIGADE (7TH DRAGOONS AND 16TH UHLANS) OF THE COMBINED CAVALRY DIVISION OF THE IVTH ARMY CORPS, TO THE MANŒUVRE-GROUND AT JESSNITZ AND RAGUHN.

The IXth Army Corps stationed in the Elbe duchies is mobilised; it has concentrated on the Lower Elbe at Hamburg, and is commencing its advance towards the Bohemian frontier in the direction of Dessau and Dresden, the latter place being the preliminary objective of operations. At Raguhn, to the south of Dessau, the Army Corps will effect its junction with the Xth Army Corps, mobilised and advancing from Hanover.

APPENDIX B.

SPECIAL IDEA

For the 1st Brigade (7th Cuirassiers and 10th Hussars) of the Combined Cavalry Division of the IVth Army Corps (supposed to belong to the Xth Army Corps).

The 1st Brigade of the Combined Cavalry Division of the IVth Army Corps, which has been pushed forward from Hanover as far as Halberstadt and Aschersleben, to cover the advance of the Xth Army Corps into Saxony, receives orders to march out of cantonments on the 8th and 9th August, and move on Hinsdorf by Stassfurt, Bernburg, and Cöthen, and also by Alsleben and Könnern; it is to completely cover the front of the Army Corps advancing by the routes indicated, to carefully reconnoitre the country, and to furnish exact reports on the movements or dispositions, and on the intentions of the enemy. The advanced guard of the Xth Army Corps will be 2½ days' march in rear of the Cavalry Brigade, which will provide a marching connecting post of an officer and 30 men (supposed) to follow it at a distance of 17½ miles, and keep up connection with the advanced guard of the Army Corps.

SPECIAL IDEA

For the 7th (Magdeburg) Cuirassiers.

The 7th Cuirassiers receives the order to march out of its cantonments at Halberstadt on the 8th August, and to move towards Hinsdorf by Wegeleben, Kochstedt, Stassfurt, Bernburg, and Göthen, four squadrons being placed in 1st line for screening and reconnoitring purposes, and one kept in 2nd line as reserve. The regiment is entrusted with the task of feeling the arc of country bounded by the villages of Kroppenstedt and Atzendorf on the north, and Hoym and Güsten on the south. After arriving in line with Güsten, close contact must be kept up with the 10th Hussars; after reaching Atzendorf, the touch must be maintained with the 16th Uhlans.

SPECIAL IDEA

For the 10th (Magdeburg) Hussars.

The 10th Hussars receives the orders to march out of its cantonments at Aschersleben on the 9th August, and to move by Alsleben and Könnern on Hinsdorf, four squadrons being placed in 1st line for screening and reconnoitring purposes, and one kept in 2nd line as reserve. The regiment is entrusted with the duty of observing the stretch of country between the villages of Gerbstedt, Dalena, Trebbichau, and Zehmitz on the south; after Amesdorf and Warnsdorf contact must be kept with the 7th Cuirassiers.

SPECIAL IDEA

For the 2nd Brigade (7th Dragoons and 16th Uhlans) of the Combined Cavalry Division of the IVth Army Corps (supposed to belong to the IXth Army Corps).

The 2nd Brigade of the Combined Cavalry Division of the IVth Army Corps, which had been pushed forward from Hamburg to Gardelegen and Stendal to cover the advance of the IXth Army Corps into the Altmärk, receives orders to march out of cantonments on the 4th August, and to move on Raguhn by the routes Dolle, Wolmirstedt, Magdeburg, Schönebeck, Barby, Aken, and Jerichow, Genthin, Loburg, Zerbst, Rosslau, Dessau; it is to cover the front of the Army Corps advancing by the routes indicated and on both banks of the Elbe, to reconnoitre the country, and to furnish exact reports on the movements or dispositions, and on the intentions of the enemy. The advanced guard of the IXth Army Corps will be $2\frac{1}{2}$ days' march in rear of the Cavalry Brigade, which will provide a marching connecting post of an officer and 30 men (supposed) to follow it at a distance of $17\frac{1}{2}$ miles, and keep up connection with the advanced guard of the Army Corps.

SPECIAL IDEA

For the 7th (Westphalian) Dragoons.

The 7th Dragoons receives the order to march out of its cantonments at Stendal on the 4th August, and to move on Raguhn by Jerichow, Genthin, Loburg, Zerbst, Rosslau, and Dessau, four squadrons being placed in 1st line for screening and reconnoitring purposes, and one kept in 2nd line as reserve. The regiment is entrusted with the duty of observing the country between the villages of Wulkow, Gollwitz, Graben, Mahlsdorf, Serno and Grochwitz, Koswig, Oranienbaum, Rossdorf, and Muldenstein on the east; and close touch must be kept up on the right flank with the 16th Uhlans towards Schönewalde, Väthen, Güsen, Hohenziatz, Deetz, Natho, Rodleben, and Mosigkau.

SPECIAL IDEA

For the 16th Altmärk Uhlans.

The 16th Uhlans receives the order to march out of its cantonments at Gardlegen on the 4th August and to move towards Raguhn by Dolle, Wolmirstedt, Magdeburg, Schönebeck, Barby, and Aken; four squadrons being placed in 1st line for screening and reconnoitring purposes, and one kept in 2nd line as reserve. The regiment is entrusted with the duty of feeling the country bounded by the villages Clüden, Meseburg, Olvenstedt, Sohlen, Beiendorf, and Eikendorf on the west; on the left contact must be maintained with the 7th Dragoons at Mahlphul, Kehnert, Lüttgenziatz, Lietzow, and Lindau, Bornum, Necken, and Chörau; and on the right with the 7th Cuirassiers from Eikendorf.

THE END.

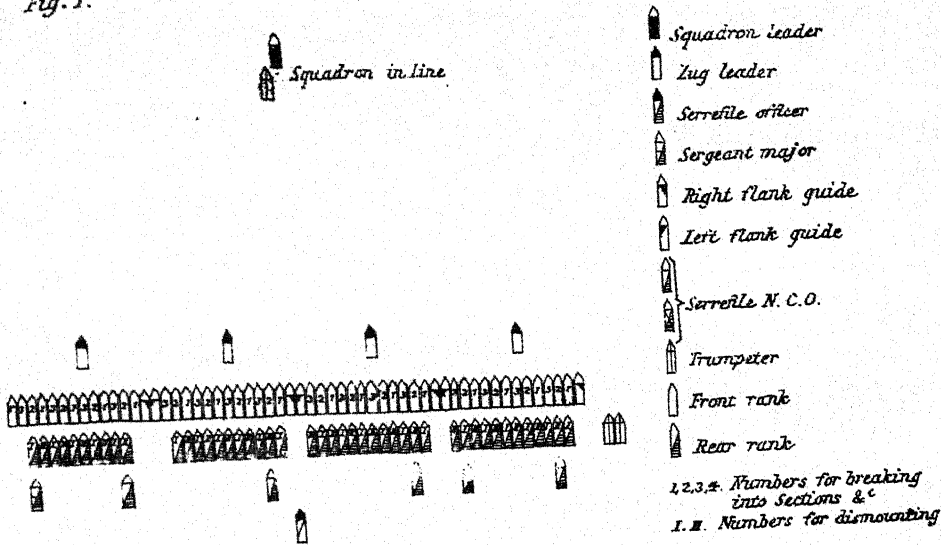
MARCH TABLE

March to the Manoeuvre-ground of the Combined Cavalry Division of the IVth Army Corps at Jessnitz and Raguhn.

[illegible]



Fig. 1.



Scale in Paces

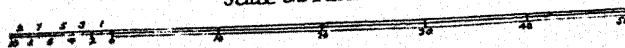
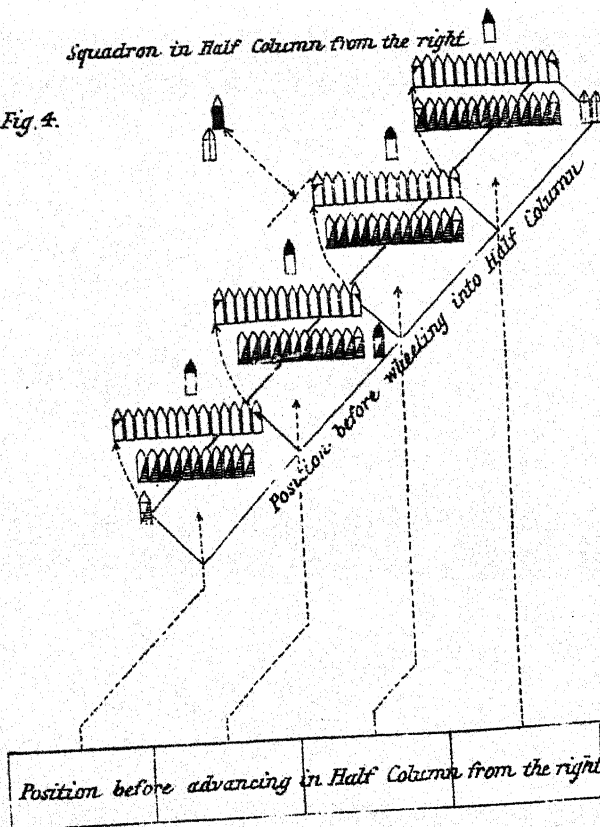


Fig. 4.



Reincorporated at the Intelligence Dep^t War Office April 1881.

Fig. 5.

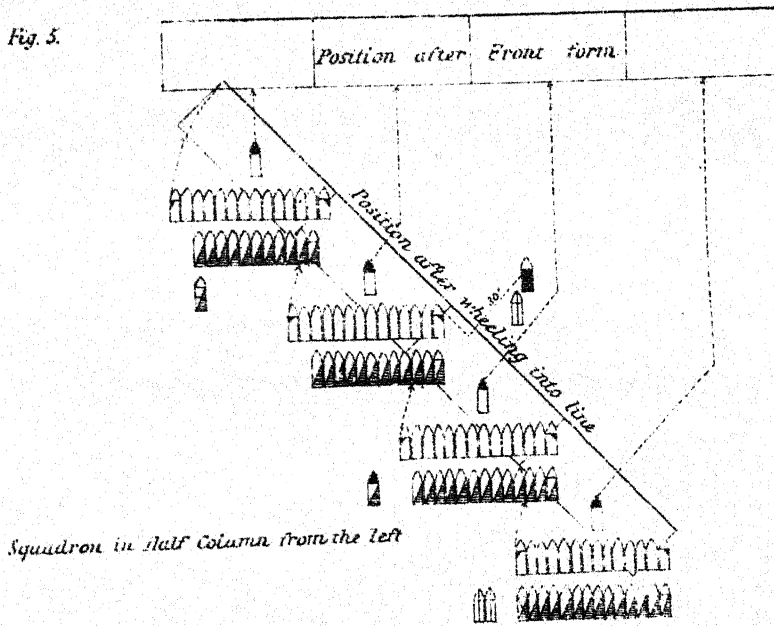
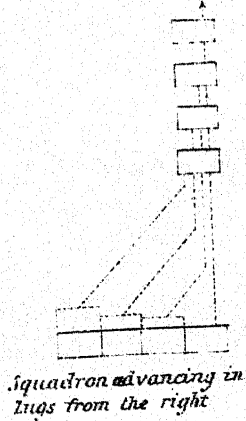
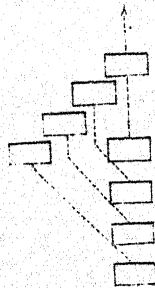


Fig. 14.



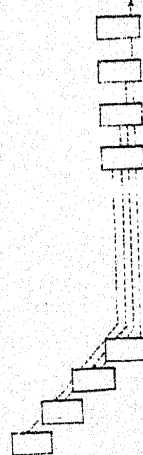
Squadron advancing in
Zigs from the right

Fig. 16.



Squadron forming Half
Column from Zig Column

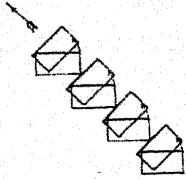
Fig. 19.



Squadron forming Zig
Column by covering

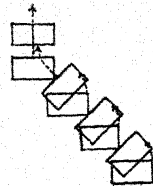
Linocographed at the Intelligence Dept War Office April 1881.

Fig. 20



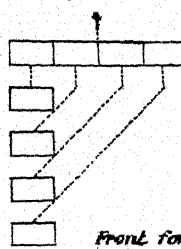
Zug Column from Half Column

Fig. 21



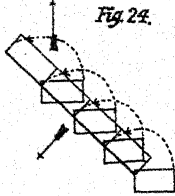
Zug Column from Half Column 7th Zug Forward

Fig. 23



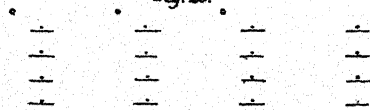
Front form from Zug Column

Fig. 24



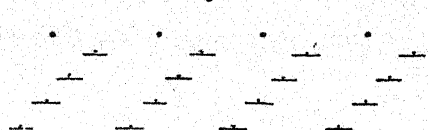
Line to the left rear by $\frac{3}{4}$ left about wheel

Fig. 26



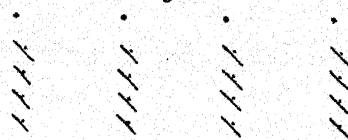
Regiment in Squadron Columns to the front

Fig. 27



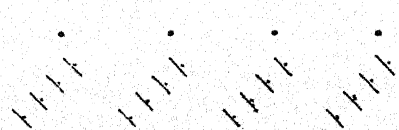
Regiment in Squadron Columns in Half Columns from the right

Fig. 28



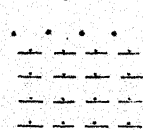
Regiment in Squadron Columns wheeled half right

Fig. 30



Regiment in Squadron Columns in echelon of heads half right

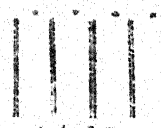
Fig. 32



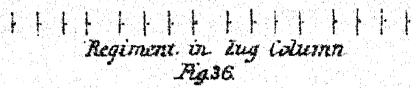
Regiment in Close Squadron Column (or von Schmidt) termed "Regimental Column to the Front" in the Regulations

Lincographed at the Intelligence Dep^t War Office April 1881.

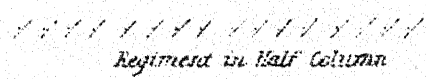
Fig 32.



Regimental Column wheeled to the right or 'Close Regt Col' of von Schmidt

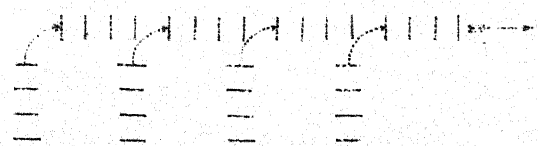


Regiment in Zug Column
Fig 36.



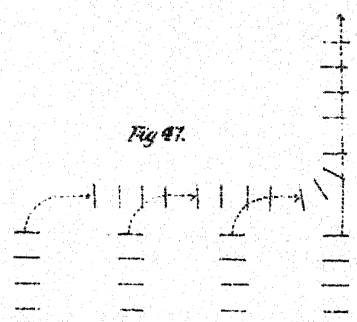
Regiment in Half Column

Fig 46.



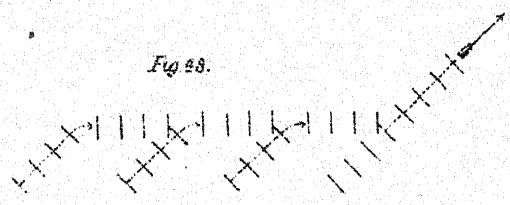
Zug Column to the right from Squadron Columns

Fig 47.



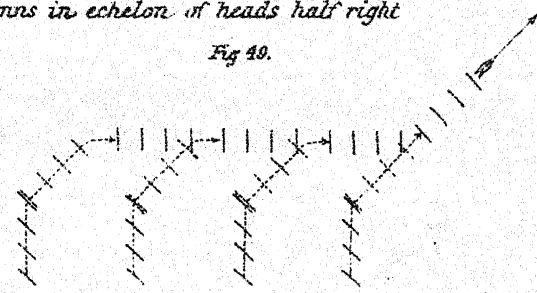
Advance in Zug Column from the right

Fig 48.



Advance in Zug Column from Squadron Columns in echelon of heads half right

Fig 49.



Advance in Zug Column from Squadron Columns wheeled half right

Lithographed at the Intelligence Dept War Office April 1881

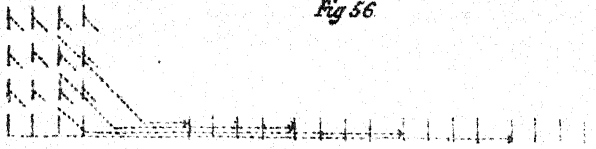


Fig 56

Zug Column from Close Squadron Column (termed 'Regimental Column to the front' in the Regulations)

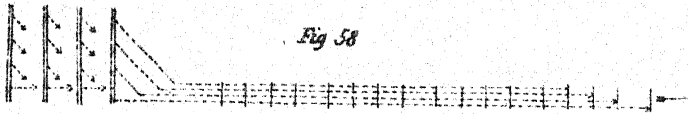


Fig 58

Zug Column from Close Regimental Column (termed 'Regimental Column wheeled to the right' in the Regulations)

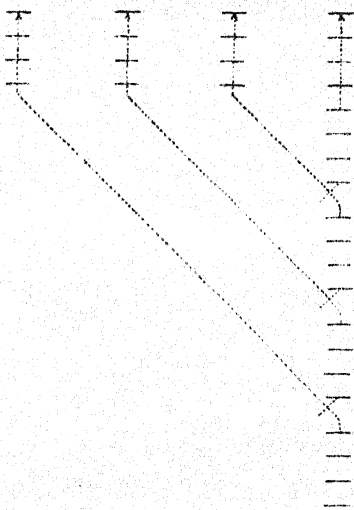


Fig 59

Squadron Columns to the front on the left from Zug Column

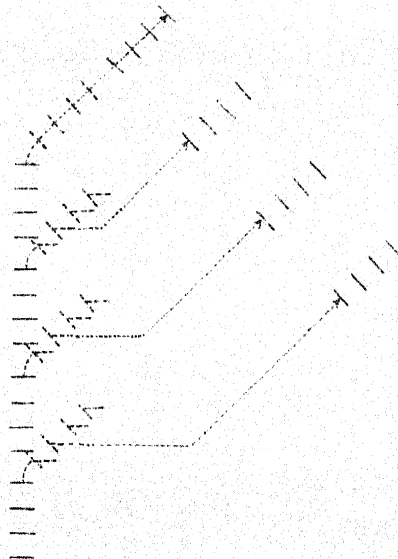
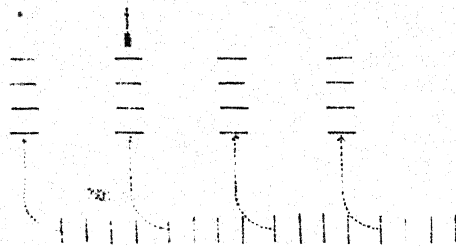


Fig 62

Regiment forming Squadron Column to the right front, executed by 'Heads of Squadrons half right', followed by 'Form Squadron Column'

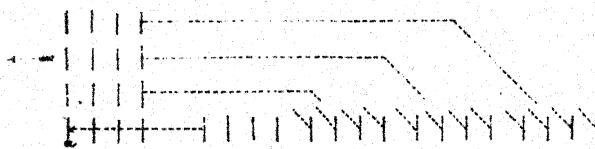
Lithographed at the Intelligence Dep^t War Office April 1881.

Fig.63



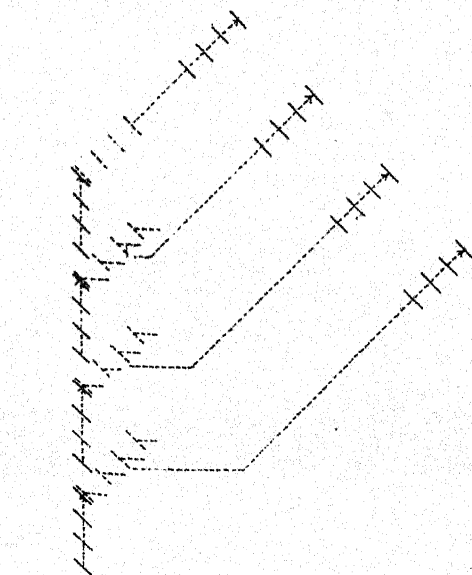
Squadron Columns to the right from Zug Column

Fig.65



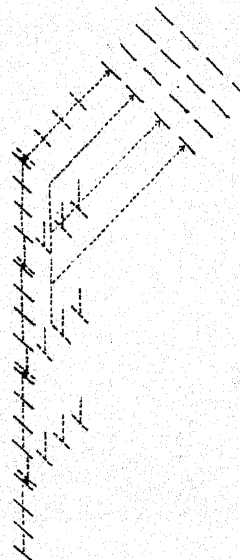
Close Squadron Column from Zug Column

Fig. 67.



Squadron Columns from Half Column

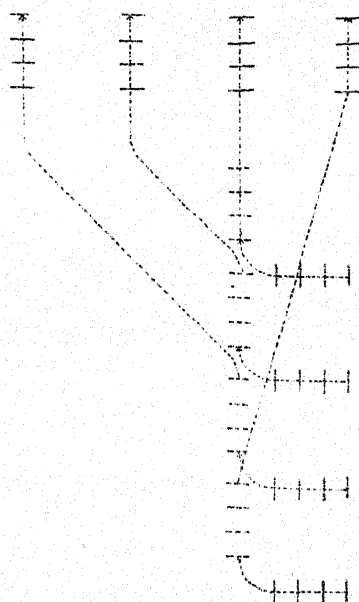
Fig. 69.



Close Squadron Column from Half Column

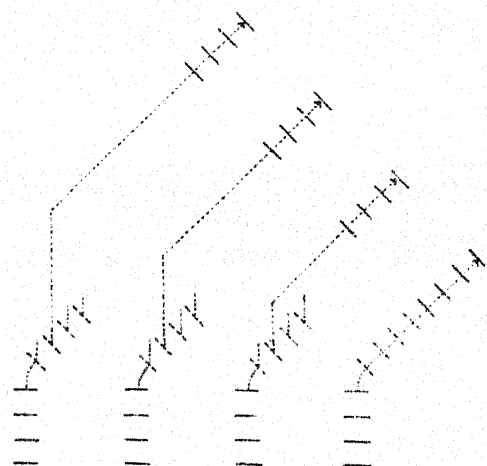
Incographed at the Intelligence Dept War Office April 1881.

Fig. 77.



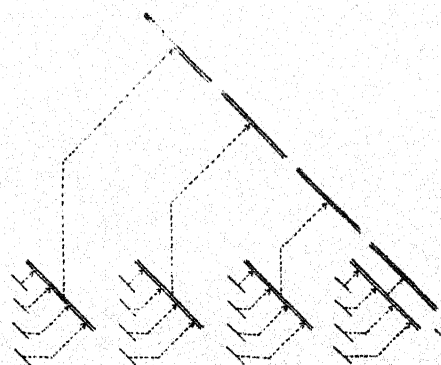
Squadron Columns changing direction to the right: Zug Column being first formed from which Squadron Columns are formed to the front on one or both flanks

Fig. 70.



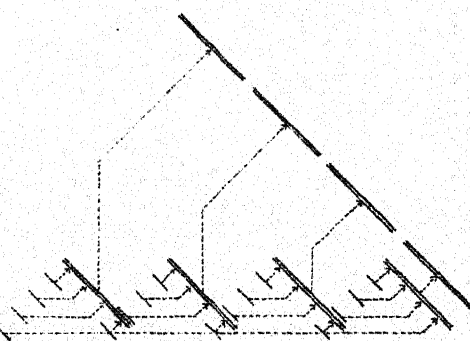
Squadron Columns changing direction half right by 'Heads of Squadrons half right' followed by 'Form Squadron Columns'

Fig. 78.



*Line from Squadron Columns wheeled half right
1st 'On the right form Squadron'
2nd 'Line to the front on the left'*

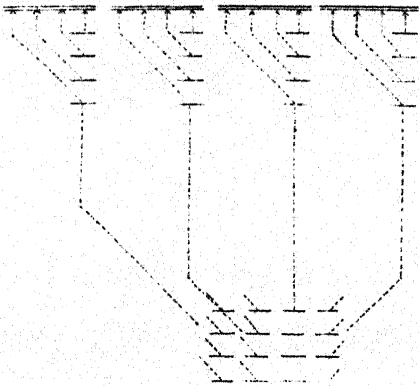
Fig. 80.



*Line from Squadron Columns in echelon of heads half right
1st 'On the right form Squadron'
2nd 'Line to the front on the left'*

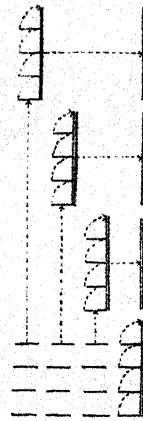
Incographed at the Intelligence Dep^t War Office April 1881.

Fig 82.



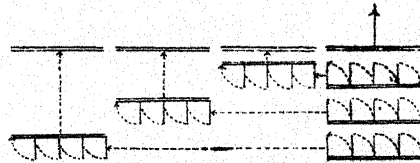
Line to the front from Close Squadron Column

Fig 83



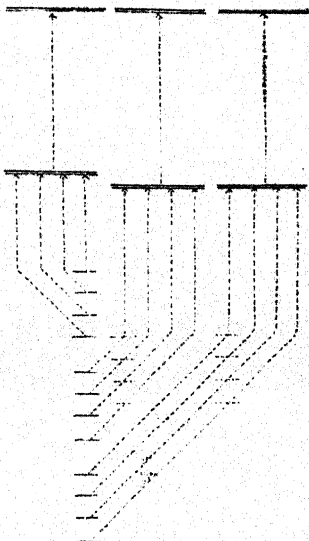
Line to the right

Fig. 84.



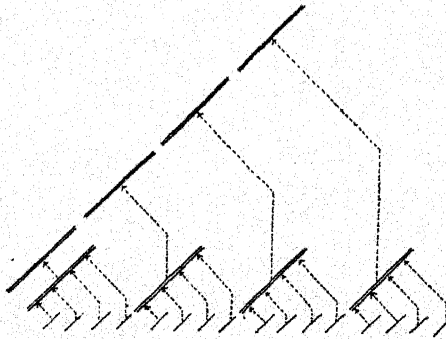
Deploy to the left

Fig 85.



Direct formation of line from Zug Column

Fig 87.

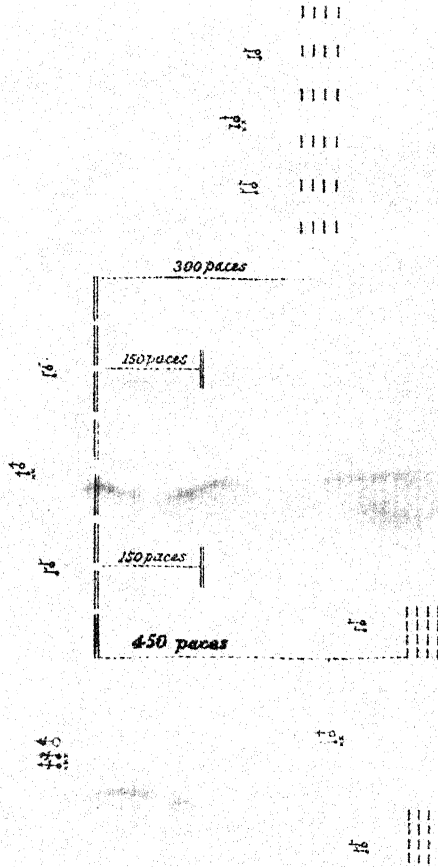


Line to the front from half Column

Lincographed at the Intelligence Dept War Office April 1881.

Intelligence Branch N° 30.

Fig 92 Cavalry Division



§§ Division Leader and Adjutants
 1 } Brigade Commander and Adjutant
 1 } Regimental Commander and Adjutant

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